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Full Name of Author — Nom complet de l'auteur

MICHAEL MILUTIN JANKOVIC

Date of Birth — Date de naissance AUGUST 16, 1950	Country of Birth — Lieu de naissance AUSTRALIA

Permanent Address — Résidence fixe

5 THORNTON STREET ELTHAM 3095 VICTORIA
AUSTRALIA

Title of Thesis — Titre de la thèse

FACTORS ASSOCIATED WITH SCHOOL PRINCIPALS' STRESS

University — Université

UNIVERSITY OF ALBERTA

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FACTORS ASSOCIATED WITH SCHOOL PRINCIPALS' EXPERIENCES OF WORK-RELATED STRESS

by

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(Signed) . . M Jankovic . . . .

PERMANENT ADDRESS:

5 Thornton Street
Eltham
Victoria, 3095
AUSTRALIA

DATED . . April 20, . . 1983

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled FACTORS ASSOCIATED WITH SCHOOL PRINCIPALS' EXPERIENCES OF WORK-RELATED STRESS submitted by MICHAEL MILUTIN JANKOVIC in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Educational Administration.

L.G. McIntosh

Supervisor

R. Bryce

External Examiner

Date April 20 1983

DEDICATED TO THE MEMORY

OF

JAMES HENRY PERRY

ABSTRACT

The purpose of the study was to identify, explore, and describe factors associated with school principals' experiences of work-related stress. Fifty elementary, elementary-junior high, junior high, and composite high school principals from the Edmonton Public School District participated in the study. Data relating to sources of stress, coping behaviors used by principals, and individual and contextual factors that either reduce or contribute to principals' experiences of work-related stress were gathered by questionnaires and semi-structured interviews.

Eighty-eight percent of Edmonton public school principals in the study reported experiencing mild to moderate levels of work-related stress. Such experiences of stress were broadly interpreted as necessary, desirable, and reasonable. Eight percent of the principals reported the principalship as "very stressful."

Work-related situations described by principals as most stressful -- dealing with unsatisfactory, ineffectual, or incompetent members of staff; resolving interpersonal conflicts among staff; resolving parent-child-teacher conflicts and misunderstandings; dealing with unreasonable parental demands or criticisms; dealing with severe student disciplinary matters; and reducing the number of surplus staff -- occur relatively infrequently. Tasks and functions of the principalship that are routine and unambiguous were reported as least stressful.

Principals use task-oriented, preventive, and avoidance behaviors for dealing with work-related stress. Avoidance behaviors were considered by principals the least effective and used least often of all the coping behaviors. Task-oriented behaviors were reported as most effective and used most frequently by principals.

Principals' perceptions of overall work-related stress were not significantly associated with their Type A behavior scores as measured by the Jenkins Activity Survey Instrument. Furthermore, Type A behavior scores of principals accounted for relatively little of the variance in the frequency of use by principals of coping behaviors.

Sources of social support such as dedicated, cohesive, and highly supportive staffs; capable and supportive assistant principals; other principals; and associate superintendents play an important role in reducing principals' experiences of work-related stress. Principals who do not have an assistant principal -- principals of "one-administrator" schools -- are without an important school-based source of advice and support.

Content analyses of the qualitative interview data revealed many factors reducing or contributing to principals' experiences of overall work-related stress. These were conceptualized as individual, intra-school, and school context factors. Individual factors describe personal orientations of principals to work in general and preferences for administrative styles in particular. Intra-school factors describe relationships between principals and their staff and students. School context factors are essentially predetermined within the immediate context of the school or by the policies of the Edmonton Public School Board and its senior administrators.

Aspects of three recently implemented changes in the administration of Edmonton public schools -- school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals -- were found to reduce principals' experiences of stress, and other aspects of each factor were found to contribute to principals' experiences of stress. While these three factors have the *net effect* of contributing to a comparatively small proportion of principals' experiences of stress, each factor was identified as having the *net effect* of reducing experiences of stress for a comparatively large proportion of principals in the study.

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TABLE OF CONTENTS

PAGE

LIST OF TABLES xxi

LIST OF FIGURES xxiv

CHAPTER

1 OVERVIEW AND PURPOSE OF THE STUDY 1

INTRODUCTION 1

PURPOSE OF THE STUDY 2

BACKGROUND OF THE STUDY 3

JUSTIFICATION FOR THE STUDY 5

Contribution to Research and the Literature . . . 5

Practical Significance 8

OPERATIONAL DEFINITIONS OF TERMS 9

DELIMITATIONS 12

ASSUMPTIONS 12

LIMITATIONS 13

ORGANIZATION OF THE THESIS 14

2 REVIEW OF THE RELATED LITERATURE AND CONCEPTUAL FRAMEWORK 16

CONCEPTUAL DEFINITIONS AND DIFFICULTIES 17

Engineering Model 17

Physiological Model 18

Transactional Model 19

CONCEPTUAL MODELS OF STRESS 21

The Person-Environment Fit Model of Stress . . . 23

CHAPTER PAGE

The Model of Teacher Stress 26

WORK-RELATED POTENTIAL SOURCES OF STRESS 28

Role in the Organization 29

Role Conflict 30

Role Overload 33

Role Ambiguity 33

Organizational Level of Responsibility 35

Boundary-Spanning Responsibility 37

Interpersonal Relationships and Conflicts 38

MODERATING FACTORS OF PERCEPTIONS OF STRESS 42

Type A Behavior Pattern 44

Type A and Type B behavioral characteristics . 44

Environmental conditions eliciting Type A behavior 46

Need Strength and Motivation 48

Situational Moderators 50

THE NATURE OF COPING 52

The Dimensions of Coping 52

Social Support 55

Coping Effectiveness 56

Predominant Coping Strategies of Type A and Type B Individuals 58

Research Studies of Coping with Occupational Stress 60

THE STATE OF THE LITERATURE AND RESEARCH 66

SUMMARY 67

CHAPTER PAGE

3 RESEARCH DESIGN AND METHODOLOGY 70

RESEARCH DESIGN 70

Purpose of the Study 70

Specific Objectives 70

Nature of the Study 71

Research Problems 71

Research problem 1: work-related sources of stress 72

Research problem 2: coping behaviors and effectiveness 72

Research problem 3: overall work-related stress and associated fadtors 73

Research Variables and Relationships 74

Respondents 77

RESEARCH METHODOLOGY 81

Qualitative and Quantitative Methods 81

Permission to Conduct the Research 81

Data Collection Procedures 82

Data Analysis 84

Quantitative data analysis 84

Qualitative data analysis 84

Qualitative data: analysis of work-related sources of stress 85

Qualitative data: analysis of factors that reduce stress experience 86

Qualitative data: analysis of factors that contribute to stress experience 86

Presentation of the Findings 87

CHAPTER PAGE

RESEARCH INSTRUMENTATION 88
  The Interview 88
  The Questionnaire 89
    Part A: School data 89
    Part B: Overall work-related stress 90
    Part C: Sources of stress 90
    Part D: Coping behaviors 90
    Part E: The Jenkins Activity Survey (Form C) . . 91
  Instrument Development 91
    The questionnaire 91
    The interview 93
  Validity and Reliability 94
    Content validity of the sources of stress and coping behavior items 94
    Reliability of the sources of stress and coping behavior instruments 94
    Construct validity of the general measure of stress 95
    Measurement of the Type A behavior pattern . . 96
    Validity of the Jenkins Activity Survey 98
    Reliability of the Jenkins Activity Survey . . 100
SUMMARY 103

4 WORK-RELATED SOURCES OF STRESS 105
  SOURCES OF STRESS 105
    Sources of Stress in Rank Order 111
    Frequency of Occurrence and Stress 116

CHAPTER PAGE

UNDERLYING DIMENSIONS IN THE SOURCES OF STRESS . . 118

  Factor 1: Role Overload, Conflict, and Ambiguity 123

  Factor 2: Establishing Consensus and Gaining Support 124

  Factor 3: Interacting with Personnel Whose Performance was Unsatisfactory 125

  Frequency of Occurrence and Stress of Factors Derived from the Factor Analysis 126

WORK-RELATED FACTORS AND INDIVIDUAL CHARACTERISTICS 129

  Discussion 132

SOURCES OF STRESS IDENTIFIED AND DESCRIBED BY PRINCIPALS 133

  Recommending the Termination of Employment or Transfer of a Teacher 140

    Unsuitable, ineffectual, or incompetent teachers 141

    Principal perceived as an enemy 142

    Formation of an enemy camp 144

    Better to get rid of them than to keep them . . 145

    Summary 146

  Overload 147

    Volume of work 147

    Timing of demands 148

    Unforeseen demands 149

    Deadlines 150

    Self-imposed overload 151

    Summary 152

CHAPTER PAGE

- Conflict Management 152
  - Resolving parent-child-teacher conflicts and misunderstandings 154
  - Resolving conflicts and misunderstandings between staff 158
  - Summary 160
- Parental Demands and Concerns 161
  - Immediacy of demands and concerns 162
  - Unreasonableness and unfoundedness of demands and concerns 163
  - Establishing a more realistic perspective . . . 166
  - Difficulty in determining the facts 167
  - Summary 168
- Confronting or Reprimanding Personnel 169
  - Summary 171
- Student Discipline 172
  - The initial confrontation 172
  - Lack of respect 173
  - Out of control children 174
- Reducing Surplus Staff 175
  - Informing a staff member that he/she would be declared surplus 176
  - The pre-decision period 177
  - Undesired consequences of applying the criteria for the designation of surplus staff 179
  - Summary 180
- SUMMARY 181

CHAPTER PAGE

5 COPING BEHAVIORS AND EFFECTIVENESS 185

COPING BEHAVIORS 185

Coping Behaviors in Rank Order of Effectiveness . 192

Frequency of Use and Effectiveness 195

UNDERLYING DIMENSIONS IN THE COPING BEHAVIORS . . . 198

Factor 1: Task-Oriented Behaviors 202

Factor 2: Preventive Behaviors 202

Factor 3: Avoidance Behaviors 203

Discussion 203

Frequency of Use and Effectiveness of Factors Derived from the Factor Analysis 204

COPING FACTORS AND INDIVIDUAL CHARACTERISTICS . . . 207

Discussion 210

SUMMARY 210

6 OVERALL WORK-RELATED STRESS AND ASSOCIATED FACTORS . 213

OVERALL WORK-RELATED STRESS 214

Discussion 216

WORK-RELATED SITUATIONS: PREDICTORS OF OVERALL WORK-RELATED STRESS 218

COPING BEHAVIORS: PREDICTORS OF OVERALL WORK-RELATED STRESS 220

INDIVIDUAL AND CONTEXTUAL FACTORS AND OVERALL WORK-RELATED STRESS 223

Individual Factors 223

Structural Factors 224

Type of school 224

Size of school 226

CHAPTER PAGE

Professional Factors 226

Experience in present school 227

Experience in total 227

Contextual Factors 228

Level of staff cohesiveness 228

Level of staff support 229

FACTORS IDENTIFIED BY PRINCIPALS AS HAVING REDUCED OVERALL WORK-RELATED STRESS 229

Sources of Support 230

Relationships with Staff 233

Mutual support 233

Appreciation and recognition of staff 234

Dedicated and competent staff 235

Open Communication and Participation in Decision-Making 236

Personal Factors 240

Human relations approach 240

A positive perspective 241

A flexible approach 241

A low-key approach 242

Ability to keep the job in perspective 242

Establishing priorities and planning a course of action 243

Recreational activities and outside interests . 244

School and Contextual Factors 245

Small schools 245

Students 246

CHAPTER PAGE

Accepting and undemanding communities 246

FACTORS IDENTIFIED BY PRINCIPALS AS HAVING CONTRIBUTED TO OVERALL WORK-RELATED STRESS . . . 248

Isolation of Not Having an Assistant Principal . 249

Isolation 250

Jack of all trades 251

Entrenched, Uncohesive, and Unsupportive Staffs . 252

Personal Factors 255

Low personal drive and energy 255

Loner 256

Reluctance to compliment staff 256

Taking the job too seriously and personally . . 256

School and Contextual Factors 258

Type of school 259

Community 259

Extra-Organizational Stress 262

EDMONTON PUBLIC SCHOOL SYSTEM FACTORS AND OVERALL WORK-RELATED STRESS 262

School-Based Budgeting 264

Aspects of school-based budgeting that reduce overall work-related stress 265

Aspects of school-based budgeting that contribute to overall work-related stress . . 268

The One-Line Authority Structure 271

Aspects of the one-line authority structure that reduce overall work-related stress . . . 274

Aspects of the one-line authority structure that contribute to overall work-related stress 275

CHAPTER PAGE

The Involvement of Principals in the Selection of Personnel 277

The selection of personnel by principals as a factor reducing overall work-related stress . 279

The selection of personnel by principals as a factor contributing to overall work-related stress 280

SUMMARY 281

7 SUMMARY, CONCLUSIONS, AND IMPLICATIONS 286

SUMMARY OF THE STUDY 286

Purpose and Objectives of the Study 286

Justification for the Study 287

Conceptual Framework 287

Respondents 288

Research Methodology 288

SUMMARY OF THE FINDINGS 289

Research Problem 1: Work-Related Sources of Stress 290

Research Problem 2: Coping Behaviors and Effectiveness 293

Research Problem 3: Overall Work-Related Stress and Associated Factors 295

DISCUSSION OF THE FINDINGS IN RELATION TO THE LITERATURE AND STUDY CONTEXT 301

Work-Related Situations 301

Coping Behaviors Used by Principals 305

Overall Work-Related Stress and Associated Factors 308

Conceptual Framework of Factors Identified as Reducing or Contributing to Stress 310

CHAPTER PAGE

CONCLUSIONS 311

IMPLICATIONS 314

Implications for Educational Administrators and School Boards 314

Implications for Researchers 317

CONCLUDING COMMENT 320

BIBLIOGRAPHY 323

APPENDICES 335

APPENDIX A: THE QUESTIONNAIRE: SOURCES OF STRESS FOR PRINCIPALS AND COPING BEHAVIORS 336

APPENDIX B: THE SEMI-STRUCTURED INTERVIEW SCHEDULE PRINCIPAL STRESS: ASSOCIATED FACTORS 343

APPENDIX C: WORK-RELATED SITUATIONS AND INDIVIDUAL CHARACTERISTICS 345

APPENDIX D: COPING BEHAVIORS AND INDIVIDUAL CHARACTERISTICS 349

APPENDIX E: THE CONTENT ANALYSIS SYSTEM 352

LIST OF TABLES

Table Page

3.1 Frequency and Percentage Frequency Distributions of Elementary, Elementary-Junior High, Junior High and Composite High Schools in the Edmonton Public School District and the Study Group 80

3.2 Correspondence Between Type A Ratings on the JAS and Type A Ratings on the Structured Interview . . 99

3.3 Internal Consistency Reliability Coefficients for the JAS 101

3.4 Test-Retest Reliability Coefficients for the JAS . . 102

4.1 Percentage Frequency Distribution of Responses and Mean Scores for Frequency of Occurrence and Stress of Work-Related Situations 107

4.2 Rank Order of Work-Related Situations According to Stress Mean Scores 113

4.3 Varimax Factor Solution for 43 Work-Related Situations Using Three Factors 120

4.4 Summary of Factors Derived from the Factor Analysis and Factor Mean Scores for Stress and Frequency 127

4.5 Pearson Correlation Coefficients of Principals' Perceptions of Stress of Each Work-Related Factor and Selected Variables: Type A Behavior Scores and Experience of Principals . . . 131

4.6 Sources of Stress Identified during Interviews as Very or Extremely Stressful 135

4.7 Comparison of the Foremost Sources of Stress Identified during Interviews with Important Sources of Stress Identified by Questionnaire . . 137

5.1 Percentage Frequency Distribution of Responses and Mean Scores for Frequency of Use and Effectiveness of Coping Behaviors 187

5.2 Rank Order of Coping Behaviors According to Effectiveness Mean Scores 193

Table Page

5.3 Varimax Factor Solution for 24 Coping Behaviors Using Three Factors 200

5.4 Summary of Factors Derived from the Factor Analysis and Factor Mean Scores for Effectiveness and Frequency 205

5.5 Pearson Correlation Coefficients of the Frequency of Use by Principals of Each Coping Factor and Selected Variables: Type A Behavior Scores and Experience of Principals 208

6.1 Frequency and Percentage Frequency Distributions of Responses on the Measure of Overall Work-Related Stress 215

6.2 Summary of the Regression Analysis for Work-Related Situations as Predictors of Overall Work-Related Stress 219

6.3 Summary of the Regression Analysis for Coping Behaviors as Predictors of Overall Work-Related Stress 221

6.4 One-Way Analysis of Variance of Mean Scores for Overall Work-Related Stress among Principals Classified According to the Grade Organization of Their Schools 225

6.5 Distribution of Solicited and Unsolicited Responses to the Impact of School-Based Budgeting Upon Principals' Experiences of Overall Work-Related Stress 266

6.6 Distribution of Solicited and Unsolicited Responses to the Impact of the One-Line Authority Structure Upon Principals' Experiences of Overall Work-Related Stress 273

6.7 Distribution of Solicited and Unsolicited Responses to the Impact of School-Based Selection of Personnel by Principals Upon Principals' Experiences of Overall Work-Related Stress 278

C.1 Pearson Correlation Coefficients of Principals' Perceptions of Stress of Each Work-Related Situation and Selected Variables: Type A Behavior Scores and Experience of Principals . . . 346

Table Page

D.1 Pearson Correlation Coefficients of the Frequency of Use by Principals of Each Coping Behavior and Selected Variables: Type A Behavior Scores and Experience of Principals . . . 350

LIST OF FIGURES

Figure Page

2.1 An Integrative Model for Organizational Stress Research 22

2.2 The Person-Environment Fit Model of Stress 24

2.3 A Model of Teacher Stress 27

3.1 Diagrammatic Representation of Factors Described and Relationships Explored 76

4.1 Scattergram of Mean Scores for Frequency of Occurrence versus Mean Scores for Stress of Each Work-Related Situation 117

5.1 Scattergram of Mean Scores for Frequency of Use versus Mean Scores for Effectiveness of Each Coping Behavior 197

7.1 Conceptual Framework of Factors Identified as Reducing or Contributing to Principals' Experiences of Overall Work-Related Stress 312

CHAPTER 1

OVERVIEW AND PURPOSE OF THE STUDY

INTRODUCTION

The principalship has been described as representing the "pivotal exchange point" in the school hierarchy (Crowson and Porter-Gehrie, 1980:65). It is the role of principal that provides the link between students, teachers, and parents on the one hand and the educational policy-making structure of school board and superintendent on the other. As an organizational boundary-spanner and middle-level administrator, the principal is often called upon to perform a most challenging role which, according to Crowson and Porter-Gehrie (1980: 66), demands ". . . very highly developed skills of staff leadership, client sensitivity, facilities management, crisis intervention, community savvy, and bureaucratic adaptability."

While some principals report the complex role of principal as very or extremely stressful, others report the principalship as not stressful or only mildly stressful (Jankovic, 1981). Even at the level of specific work-related demands or situations vast differences in perceptions of stress are reported. Certain demands of the principalship represent an opportunity for professional growth and challenge for some principals and, yet, for others these same demands create excessive stress. Administrators bring to the principalship their own unique set of expectations, abilities, experiences, and idiosyncrasies which probably interact with contextual factors to influence principals' perceptions of the stress associated with work-related situations. Furthermore, personal characteristics and contextual factors interact to influence, to some extent, the manner in which principals attempt to cope administratively with these demands.

Research designed to identify sources of excessive stress for principals and coping behaviors which are employed to deal with work-related stress is justified in the interests of more effective school administration and the long-term well-being of principals.

PURPOSE OF THE STUDY

Clearly a certain level of work-related stress is to be expected by principals as they function in their capacity as organizational boundary-spanners and middle-level administrators. Selye (1974) has argued that some stress is both desirable and necessary for the efficient and effective functioning of an individual. However, it is also apparent that some school principals experience excessive or overburdening stress arising from particular work-related situations and from the role of principal in general.

The purpose of the study was to identify, explore, and describe work-related situations, coping behaviors used by principals, and other factors associated with the variance in principals' experiences of overall work-related stress.

To fulfill the study purpose it was necessary to satisfy the following objectives:

1. To identify and describe work-related sources of stress for a group of principals.

2. To identify and describe coping behaviors used by principals

and to report principals' perceptions of the relative effectiveness of coping behaviors.

3. To identify, explore, and describe work-related situations, coping behaviors used by principals, and individual and contextual factors that either reduce or contribute to principals' experiences of overall work-related stress.

The three major objectives of the study were achieved through research directed at an examination of three major problem statements each of which included several related sub-problem statements. These problem statements were derived from the conceptual framework of the study and the review of the related literature and are presented in Chapter 3.

BACKGROUND OF THE STUDY

Considerable interest in the quality of work-life for teachers has been generated among educators in Alberta following the release of the report of the Government of Alberta Fact Finding Commission (Kratzmann et al., 1980). The Commissioners concluded that, "Factors such as reduced support for teachers inside and outside the educational community coupled with increasing workloads and rapidly shifting social circumstances have clearly led to unprecedented levels of stress within this occupational group " (Kratzmann et al., 1980:35).

Shortly after the release of the Kratzmann et al. (1980) report a doctoral study of organizational stress experienced by teachers was completed in an Alberta context by Williams (1981). This study provided further insight into the nature of work-related sources of stress for teachers. The major organizational sources of stress for teachers reported by Williams (1981:123) were: "Lack of proper placement for students with special needs," "Lack of sufficient planning time during school day," "Lack of time during school day to get work done," "Unmotivated students," "Disruptive students," "Lack of public appreciation for work teachers do," and "Over-sized classes."

Williams (1981:38) employed a model of teacher stress which was developed by Kyriacou and Sutcliffe (1978a) as the conceptual framework for her study. It appears that Kyriacou and Sutcliffe (1977a, 1977b, 1978a, 1978b, 1979a, 1979b) and Kyriacou (1980a, 1980b, 1980c, 1980d, 1981) have been the forerunners in research into teacher stress. Even though the Kyriacou and Sutcliffe (1978a) model of teacher stress evolved from research conducted in the British context, the model of teacher stress appears sufficiently general to be readily applicable to Canadian contexts. Williams (1981:224) provided support for this contention when she concluded that, "The present study provided support for the Kyriacou and Sutcliffe (1978a) model of teacher stress . . . ."

Fewer studies of school administrator stress have been reported in the literature than studies of teacher stress. Furthermore, most of the reported studies of school administrator stress have been conducted in the United States. Major questions related to sources of stress for school principals and strategies for coping with work-related stress have not been addressed in an Alberta context. The writings of Kyriacou and Sutcliffe (1978b), Baum et al. (1981), House (1974), Pearlin and Schooler (1978), and Newman and Beehr (1979) suggest that research designed to account for the apparent variation among school administrators in their perceptions of overall work-related stress should describe and explore the complex interaction of specific work-related sources of stress, contextual factors, and individual coping behaviors. Hence, this study was designed to describe and explore, in an Alberta context, individual and contextual factors associated with school principals' experiences of work-related stress.

JUSTIFICATION FOR THE STUDY

Contribution to Research and the Literature

In a recent review of the literature on stress and the environment, Baum et al. (1981:28) conclude that a persistent and largely unanswered question has been why some individuals are more susceptible to stress-related disorders than others. They (1981:28) believe that this question could be most profitably explored by considering transmission variables. For example, Baum et al. (1981:28) write:

> . . . prior experience may be an important factor that can be viewed as both (1) providing coping resources for future encounters with the stressor, and (2) influencing the perception and appraisal of that stressor.

Baum et al. (1981:28) add that coping resources such as skills and social support, as well as appraisal variables and dispositional variables may be responsible for different responses to identical stressors. They (1981:28) contend that investigations of such variables would delineate the relationship between stressors and variations in response through examination of individuals' interpretations of external and internal events. Support for the need to investigate dispositional characteristics was found in two studies of the prevalence and sources of teacher stress by Kyriacou and Sutcliffe (1977b, 1978b), and in a study of the prevalence and sources of principal stress by

Jankovic (1981). Kyriacou and Sutcliffe (1978b:166) conclude that:

> . . . in investigating the relationship between stressors and stress . . . the personality characteristics rather than the biographical characteristics of the individual may be the more important determinant of individual differences in teacher stress.

In reference to stress coping strategies, Kyriacou (1981:56) maintains that ". . . few studies have investigated how teachers actually cope." There is no shortage of advice in teachers' journals on how to cope, according to Kyriacou (1980b:12); however, Kyriacou (1980b:12) maintains, the major problem is that little attempt is made to tailor advice to match differing individual needs. Some strategies may be appropriate for certain individuals but ineffective for others. Newman and Beehr (1979:35) also conclude that many personal and organizational strategies for handling stress have been espoused in spite of a weak empirical base. They (1979:35) maintain that even though suggested strategies for handling stress ". . . seem to glow with an aura of face validity, . . ." the difficult task of empirically validating the effectiveness of strategies remains. Newman and Beehr (1979:35) state that until this is accomplished ". . . practitioners have little more than their common sense and visceral instincts to rely on as they attempt to develop badly needed preventive and curative stress management programs."

Consideration of individual coping responses to stress in conjunction with individual or social situational characteristics, objective work conditions, and subjective perceptions thereof can provide answers, according to House (1974:24-25), to the following questions:

> 1. What kinds of coping or adaptation responses mitigate the effects of stress . . . ?

> 2. Are certain kinds of coping responses effective only for certain kinds of stresses? For certain types of persons? In certain situations?
> 3. What individual . . . and social situational characteristics determine the kind of strategy a person chooses for coping with given stresses?

In a more recent review of the literature on coping styles, Dewe et al. (1979:69) suggest that coping styles may depend on the sources of stress, the options available, and the individual's personality. Support for further research into these aspects is provided by Pearlin and Schooler (1978:2) who state that ". . . we know relatively little of the nature and substance of people's coping repertoires and even less of the relative effectiveness of different ways of coping." In supporting such a line of investigation, Newman and Beehr (1979:39) advise that researchers need to pay particular attention to the interactions of individual and situational variables in determining the effectiveness of stress management strategies.

House (1974:22) maintains that further research is justified into the role of personality in leading individuals into stressful situations and/or exaggerating the effects of such situations. The Type A personality -- characterized by aggressiveness, excessive competitive drive, impatience, and intense job involvement -- has been implicated in several stress models (Howard et al., 1975, 1977; Cooper and Marshall, 1976) as an important determinant of perceptions of stress and coping responses to stress. Even though a substantial body of literature and research linking Type A behavior to coronary heart disease is available (Jenkins, 1976), the study of the social-psychological nature of Type A behavior has begun only recently (Dembroski and MacDougall, 1978:23). Dimsdale et al. (1978:580) add that, "Studies of the relationship between Type A behavior and other psychological variables are sparse and contradictory." Pittner and Houston (1980:156) also maintain that:

> Further exploration is needed of possible differences between Type A and B individuals in how they cognitively cope with various stressful situations and how these differences may affect the behavior of Type A and B individuals in such situations.

This study describes, in an Alberta context, the nature of sources of stress for a group of principals, coping behaviors that these principals use to deal with work-related stress, and principals' perceptions of the relative effectiveness of such coping actions. In addition the study identifies and describes individual and contextual factors associated with principals' perceptions of stress. As such, this study builds on previous research and contributes information that was not previously available in the literature. Furthermore, because this is a descriptive and exploratory study, it provides suggestions for further intensive research.

Practical Significance

A major justification for this research is its potential for practical application. The study identifies coping behaviors that have been judged effective or ineffective by practising principals. This should enable practising administrators to broaden their repertoires of stress coping strategies.

More importantly, the study provides principals with a greater understanding of the dynamic interactions between work-related situations, individual and contextual factors, coping behaviors, and experiences of work-related stress. Future administrative and coping behaviors could be directed more appropriately to reduce experiences of stress by principals in the interests of their welfare and improved school administration.

The growing number of pre-service and in-service educational seminars and conferences directed toward stress awareness and management is indicative of professional and community concern about the deleterious effects of excessively stressful experiences. This study provides additional field-based information to those concerned with developing and providing pre-service and in-service stress education programs. The research data and findings should be of value also to educational policy makers because such data provide a framework which may assist with the formulation of policy to reduce stress experiences of principals.

OPERATIONAL DEFINITIONS OF TERMS

The following operational definitions serve to provide a basis for clarity and uniformity of understanding of terms which are used repeatedly throughout the study. Other terms are defined as they appear in the text of this report.

Stress is the experience of a whole range and mixture of unpleasant sensations: predominantly tension, anxiety, depression, frustration, and a feeling of being emotionally drained resulting from pressures or overburdening demands. This simple definition of stress was used for the purposes of data collection. A comprehensive conceptual development of stress is provided in Chapter 2 of the study.

Overall work-related stress is a measure of principals' perceptions of the stress that they experience on average in their work roles.

Work-related situation refers to any aspect, event, prescription, requirement, or duty of the work role of a principal.

Coping refers to any response to potential sources of stress that serves to prevent, avoid, or control experiences of stress.

Coping behavior refers to any behavioral response to potential sources of stress that serves to prevent, avoid, or control experiences of stress.

Coping strategy refers to a plan of behavior aimed at preventing, avoiding, or controlling experiences of stress.

Coping behavior effectiveness is a measure of the extent to which principals report that a particular coping behavior prevents, avoids, or controls experiences of stress.

Type A behavior is primarily characterized by aggressiveness, high ambition, a strong sense of time urgency, excessive drive, intense involvement in competitive activities, overcommitment to vocational or professional pursuits, restlessness, impatience, accentuated motor mannerisms, and a staccato style of verbal response (Jenkins et al., 1967). By contrast, the Type B behavior pattern individual is characterized as relaxed, more easy going, is not easily irritated, works steadily but without a strong sense of time urgency, and generally moves and speaks in a smoothly modulated style. The Type B behavior individual is characterized, therefore, by the relative absence of Type A behaviors, and is less preoccupied with social achievement and with competitive occupational pursuits (Jenkins et al., 1967).

In addition to the operational definitions of recurring terms, the following terms are used to describe personnel involved in the study.

Elementary school principal refers to full-time principals of elementary schools in the Edmonton Public School District with pupil enrollments in kindergarten and grades 1 to 6 inclusively.

Junior high school principal refers to full-time principals of junior high schools in the Edmonton Public School District with pupil enrollments in grades 7, 8 and 9 only.

Elementary-junior high school principal refers to principals who are responsible for the total operation of schools, in the Edmonton Public School District, which have combined enrollments of students classified as either "elementary pupils" or "junior high pupils." Hence, pupil enrollments of elementary-junior high schools are usually kindergarten and grades 1 to 9 inclusively. In most cases elementary and junior high pupils are accommodated in the same building; however, in a few cases the elementary school campus and junior high school campus are directly adjacent to one another.

Composite high school principal refers to full-time principals of composite high schools in the Edmonton Public School District with pupil enrollments in grades 10, 11 and 12 only. These schools are often referred to as "senior high schools." The curriculum of a composite high school is designed to provide for both the academic and vocational preferences of pupils.

DELIMITATIONS

1. The study was confined to a group of 50 elementary, elementary-junior high, junior high, and composite high school principals from the Edmonton Public School District.

2. It is generally accepted in the literature that work-related situations are not the only sources of stress in most individuals' lives. Extra-organizational situations may contribute more than work-related situations to an individual's experience of stress. The study was expressly delimited to an identification and description of work-related sources of stress and, as such, no attempt was made to identify extra-organizational sources of stress for principals.

3. The study did not investigate psychological, physiological, or behavioral manifestations of stressful experiences. Furthermore, it did not examine the psychiatric, psychosomatic, or physiological consequences of stress.

4. The study was not designed to compare the stressfulness of the principalship with the stressfulness of other professions. Therefore, it would not be appropriate to imply, infer, or conclude any comparisons between the stressfulness of the principalship and the stressfulness of any other occupation or profession.

ASSUMPTIONS

The following assumptions were made in relation to this study:

1. That perceptions of respondents regarding overall work-related stress, coping behavior effectiveness, and stress associated with specific work-related situations were a valid means of measuring

these variables.

2. That the 50 principals who participated in the study were representative of all principals in the Edmonton Public School District.

3. That all respondent principals were able to comprehend each question in the sense intended by the researcher and that they consistently applied the definition of stress, as provided at the beginning of the questionnaire, to these questions.

4. That responses given to all questions during each interview were sincere and as accurate as possible.

LIMITATIONS

The delimitations and assumptions previously outlined constitute certain limitations to the study. The following additional limitations apply:

1. Because the study was confined to a group of elementary, elementary-junior high, junior high, and composite high school principals, the findings, summaries, descriptions, and conclusions may be restricted to principals of the Edmonton Public School District. However, to the extent that principals from other school districts are similar and have comparable circumstances to principals in the Edmonton Public School District, the findings may lead to conjectures and generalizations about principal stress in other school systems.

2. The study was limited to the extent that data gathering was of principals' self-reports during semi-structured interviews and on a structured questionnaire.

3. The study was limited to the extent that not all work-related situations and coping behaviors could be included in the questionnaire.

4. The study was conducted at a time when considerable interest had been generated in the media, at professional conferences, and in professional journals about occupational stress and its apparent negative effects. The possibility exists that principals may have been influenced by such popular reports and their responses may have been biased in the direction of self-interest.

5. There is a possibility that systematic biasing factors could have affected the representativeness of the sample of principals. However, certain precautions were taken in the selection of respondents to reduce the likelihood of systematic biasing factors. These are discussed in Chapter 3.

6. The study was limited to the extent that principals' perceptions and assessments of stress associated with work-related situations may have been affected by ego-defensive or other mechanisms, or by their extra-organizational experiences of stress.

ORGANIZATION OF THE THESIS

The following were presented in this chapter: (1) an introduction to the study problem, (2) the purpose and objectives of the study, (3) the background of the study, (4) the justification for the study, (5) operational definitions of major terms, (6) the delimitations, (7) the assumptions, and (8) the limitations.

In Chapter 2, conceptual models of the stress process are reviewed and the conceptual framework for the study is presented. In addition, literature deemed relevant to the delimited aspects of the study is reviewed. Major topics examined include: work-related potential sources of stress, moderating factors of perceptions of stress, and the nature of coping.

Chapter 3 contains an outline of the design and methodology of the study. Descriptions are presented of the sample selection procedure, research instrument development and validation, the data collection procedure, and analysis techniques. Also included are the research problems which guided the investigation, analysis of data, and reporting of findings.

In Chapter 4, data collected in relation to Research Problem 1 are presented and analyzed. Work-related sources of stress for principals are identified and described.

In Chapter 5, data collected in relation to Research Problem 2 are presented and analyzed. Coping behaviors used by principals to deal with work-related stress are identified and described. In addition, assessments by principals of the relative effectiveness of coping behaviors are presented.

In Chapter 6, data collected in relation to Research Problem 3 are presented and analyzed. Principals' perceptions of overall work-related stress are reported. Furthermore, work-related situations, coping behaviors used by principals, and other factors associated with principals' experiences of overall work-related stress are identified, explored, and described.

A summary of the study and its findings is presented in the final chapter. In addition, the findings are discussed in relation to the literature and study context, and conclusions are presented. Implications of the study for practitioners and researchers are also outlined.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE AND CONCEPTUAL FRAMEWORK

In this chapter the conceptual framework for the study is developed and related literature is reviewed to establish a background perspective for the study. The literature reviewed serves to bring together existing knowledge of administrative stress, to assess its significance, to identify inadequacies and weaknesses in the knowledge base and breadth of the topic, and to justify the selection of the research problems of the study. This was a descriptive and exploratory study of the sources of stress for school principals, stress coping strategies and behaviors of principals, including factors that moderate principals' perceptions of stress. Therefore it was considered necessary to provide a review of the literature that: (1) establishes a conceptual framework for stress, (2) examines current knowledge in relation to potential sources of stress, (3) explores some of the variables that have been implicated as moderating factors of perceptions of stress, and (4) synthesizes propositions about the nature of coping with recent research into stress coping strategies and behaviors. Hence, the review is delimited to the following major topics:

1. Conceptual definitions and difficulties,
2. Conceptual models of stress,
3. Work-related potential sources of stress,
4. Moderating factors of perceptions of stress, and

5. The nature of coping.

A considerable volume of literature on the topic of stress is now available; however, only literature that was deemed relevant to the above major topics and the study has been included in this review.

CONCEPTUAL DEFINITIONS AND DIFFICULTIES

A review of the literature reveals numerous different definitions and uses of the term "stress." The diversity of definitions of stress is probably a reflection of the wide range of interests and areas of research into the topic. Cox (1975:493) suggests that even though most people have a personal understanding of what is meant by a stressful experience, definitions of the stress concept tend to evolve from one of three conceptual perspectives. These are described by Cox (1975:493-494) as the "engineering" model, the "physiological" model, and the "transactional" model.

Engineering Model

Cox (1975:493) explains that in the engineering perspective external forces or pressures that are applied to a body produce a reaction or strain within the body. In this sense, Cox (1975:493) explains, stress takes the form of an environmental stimulus; it ". . . is what happens to a person, not what happens within him." The "engineering" analogy has been utilized by Gmelch (1977:7) who defines stress as ". . . any action or situation that places physical or psychological demand on people." In a similar sense Gavin and Axelrod (1977:67) define stress as ". . . those aspects of the organization which the individual perceives as external forces acting upon him," and strain as ". . . those variables reflecting the individual's reactions to stress." Other researchers who have adopted the "engineering" analogy for stress include Beehr (1976), Cooper and Marshall (1976), French and Caplan (1973), Kahn (1973), Margolis et al. (1974), and Wild and Hanes (1976).

Physiological Model

Cox (1975:493) explains that in the "physiological" model stress is defined in terms of a state or response pattern displayed by an individual. Selye (1974, 1976a, 1976b) provided the impetus for this perspective when he argued that medical research has shown that even though people may face quite different problems and demands, they respond with a standard pattern of biochemical and physiological changes which essentially prepare the body to readjust to the new situation. Selye (1974:15) maintains that it is immaterial whether the situation being faced is pleasant or unpleasant; all that is important is the intensity of the demand for adaptation to the new situation.

Selye (1974:14) defines stress as ". . . the non-specific response of the body to any demand made upon it." The stress response is "non-specific" in the sense that only its causation is not specific to any particular agent or demand. The pattern of the stress reaction itself (such as changes in the pituitary, adrenal, thymus, heart rate and gastrointestinal tract) is highly specific.

Selye (1974:15) does distinguish, however, between two forms of stress: "eustress" which comes from a pleasant or exciting experience; for example, a wedding, a promotion, or retirement; and "distress" which comes from unpleasant situations such as the death of a spouse, divorce, or bankruptcy. According to Selye (1974) the body still responds to both kinds of stress in the same manner. It senses only that something has happened that requires a change beyond the normal level of response. Hinkle (1974:335) indicates that accumulated experimental evidence has confirmed that ". . . a large proportion of the manifestations of disease are produced by reaction of the host and not directly by the 'causal agents' of disease, and that the components of the host's reactions are not in themselves 'specific' to any given 'causal agent'; . . . ."

The physiological perspective of stress was aptly summarized by Selye (1976b:1) when he stated very simply that stress is ". . . essentially the rate of wear and tear in the body."

Transactional Model

Cox (1975:494) labels definitions that conceptualize stress as resulting from a discrepancy between perceived demands and perceived ability to cope as "transactional" models of stress because these focus on the interaction between the environment and the individual to determine whether stress will occur. In this perspective, McGrath (1970:17) emphasizes, stress exists not as the result of an imbalance between demands and response capabilities of the individual but, rather, as occurring only if the focal person anticipates an inability to cope adequately with demands under conditions where failure to meet demands has important perceived consequences. Chan (1977:89) supports this view by stating that:

> A life event or situation becomes stressful only when it is perceived as such by the implicated person or group as a result of awareness of unavailability or depletion of coping resources. Accordingly, an event becomes stressful when either magnitude of

> change or undesirability evoked is beyond the competence of the coping person.

Hence, the definition of stress in the transactional perspective is neither solely in terms of stimulus conditions, nor uniquely in terms of response patterns. Stress is defined with respect to both environmental and individual factors and, more importantly, with respect to mediating perceptual mechanisms. For instance, Appley and Trumbull (1967) have argued that stress is a consequence of either the perception of threat from the environment or the perception of danger to well-being. Cox (1975:494) explains that the presence of this perceptual factor suggests that a whole range of individual variables which influence perception will moderate, in turn, an individual's response to environmental demands.

Cox (1975:494) explains further that stress, which is created by the important perceived imbalance between demands and coping capacities, produces characteristic behavioral, physiological, and subjective responses. The subjective response is the feeling of being stressed, and is dependent to some extent upon the physiological changes which occur. Kyriacou and Sutcliffe (1978a:2) maintain that although the conceptualization of stress as an affective reaction is most in line with common usage, a more satisfactory definition is one that combines the physiological and transactional definitions. They (1978a:2) contend, also, that the engineering model of stress appears to be inappropriate because it fails to take into consideration the important function of perception and appraisal mechanisms in the assessment by individuals of environmental stimuli. Hence, Kyriacou and Sutcliffe (1978a:2) provide a definition for teacher stress which would probably find considerable support among educators, psychologists, and physiologists:

> Teacher stress may be defined as a response of negative affect (such as anger or depression) by a teacher usually accompanied by potentially pathogenic physiological and biochemical changes (such as increased heart rate or release of adrenocorticotrophic hormones into the bloodstream) resulting from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to his self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat.

Although this definition has been written for teacher stress, it has been written in sufficiently general terms so that it could be rewritten readily as a definition for educational administrator stress.

CONCEPTUAL MODELS OF STRESS

The stress concept includes physiological, psychological, behavioral, and social considerations. Researchers from various disciplines have established "traditions" of research into the stress concept that reflect their respective disciplinary interests. After reviewing different research and definitional perspectives of stress, McLean (1972:15) concluded that the term "stress" should be considered more appropriately as ". . . a collective term for an area of study." Baum et al. (1981:12) maintain that stress refers to a "process," and researchers from different "traditions" examine different phases of the process. Ivancevich and Matteson (1980:42-45) present an integrative model for organizational stress research which has been deemed worthy of inclusion because it illustrates some of the units of analysis and interdisciplinary perspectives of research into the stress process. The model is shown in Figure 2.1. The major units of analysis include: sources of stress, psychological and physiological stress, moderating

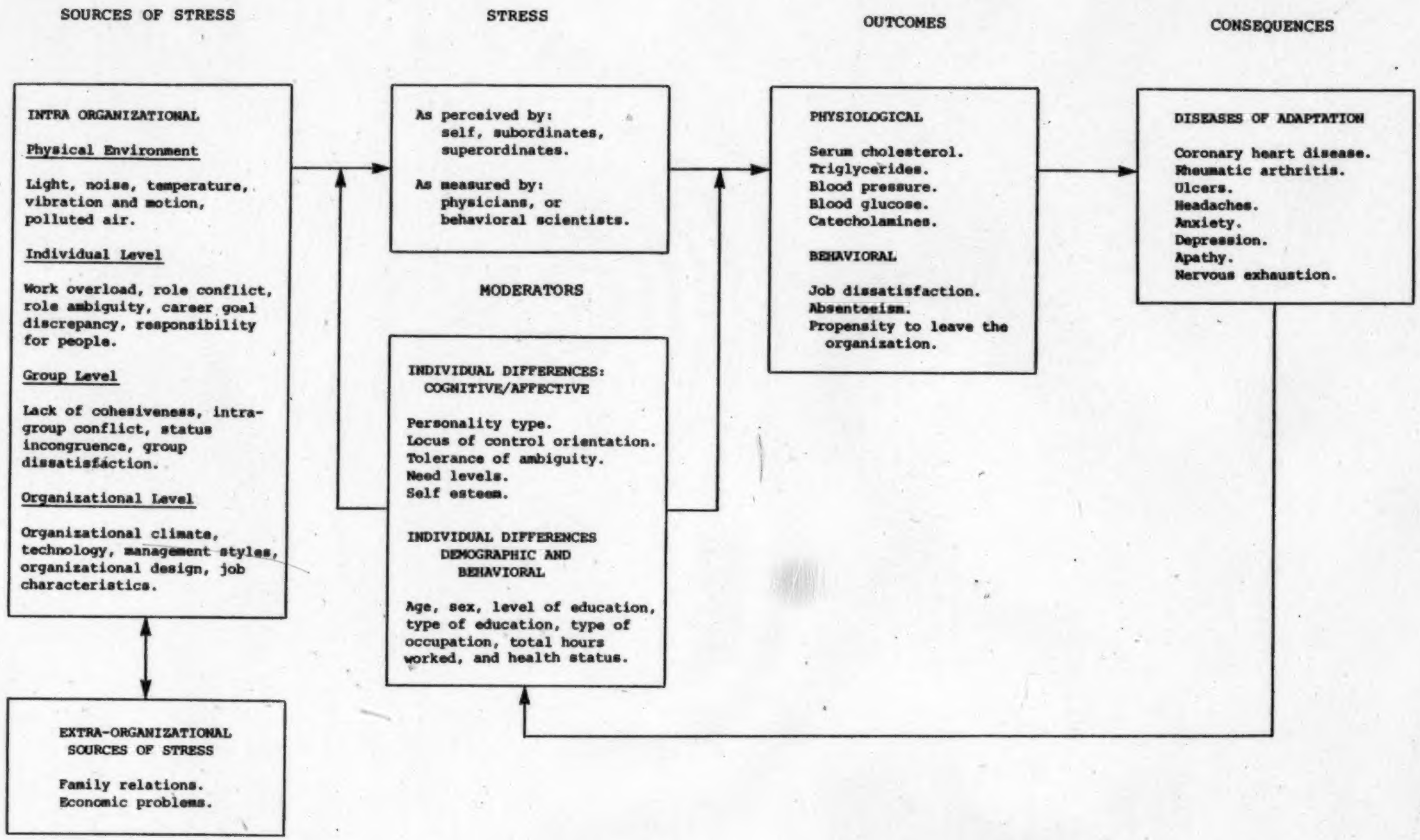

SOURCES OF STRESS
STRESS
OUTCOMES
CONSEQUENCES
INTRA ORGANIZATIONAL
Physical Environment
Light, noise, temperature, vibration and motion, polluted air.
Individual Level
Work overload, role conflict, role ambiguity, career goal discrepancy, responsibility for people.
Group Level
Lack of cohesiveness, intra-group conflict, status incongruence, group dissatisfaction.
Organizational Level
Organizational climate, technology, management styles, organizational design, job characteristics.
EXTRA-ORGANIZATIONAL SOURCES OF STRESS
Family relations.
Economic problems.
As perceived by: self, subordinates, superordinates.
As measured by: physicians, or behavioral scientists.
MODERATORS
INDIVIDUAL DIFFERENCES: COGNITIVE/AFFECTIVE
Personality type.
Locus of control orientation.
Tolerance of ambiguity.
Need levels.
Self esteem.
INDIVIDUAL DIFFERENCES DEMOGRAPHIC AND BEHAVIORAL
Age, sex, level of education, type of education, type of occupation, total hours worked, and health status.
PHYSIOLOGICAL
Serum cholesterol.
Triglycerides.
Blood pressure.
Blood glucose.
Catecholamines.
BEHAVIORAL
Job dissatisfaction.
Absenteeism.
Propensity to leave the organization.
DISEASES OF ADAPTATION
Coronary heart disease.
Rheumatic arthritis.
Ulcers.
Headaches.
Anxiety.
Depression.
Apathy.
Nervous exhaustion.

Figure 2.1. An Integrative Model for Organizational Stress Research (Adapted from Ivancevich and Matteson, 1980:42).

factors of stress experience, outcomes of stress, and consequences of stress. Ivancevich and Matteson (1980:42) warn that the variables which are presented in the research model should not be construed as exhaustive nor is it implied that these variables have been fully researched.

Numerous conceptual models of the stress process have been presented in the literature (Dohrenwend, 1961; French and Caplan, 1973; Levi, 1973; Kagan and Levi, 1974; House, 1974; Miles, 1976a; Cooper and Marshall, 1976; Gmelch, 1977; Swent and Gmelch, 1977; Howard et al., 1977; Cox, 1978; Quick and Quick, 1979; Fineman, 1979; Christie and McBrearty, 1979). The person-environment fit model of stress by Marshall and Cooper (1979), and the model of teacher stress by Kyriacou and Sutcliffe (1978a), have been deemed worthy of review because both provide an interdisciplinary perspective of the stress process and establish a conceptual framework for this study.

Marshall and Cooper (1979:49) suggest that stress is not a characteristic of either the individual or environment but, rather, the outcome of the interaction between the two. Incorporated into their model of stress is the notion that an individual's perception and cognitive appraisal mechanisms are the link between objective situations and the individual's experience of stress.

The Person-Environment Fit Model of Stress

The model, as proposed by Marshall and Cooper (1979:50), is illustrated in Figure 2.2. According to this model, stress occurs as a consequence of the "fit" between the individual and environment. The effect of a potentially stressful situation (stressor) on the

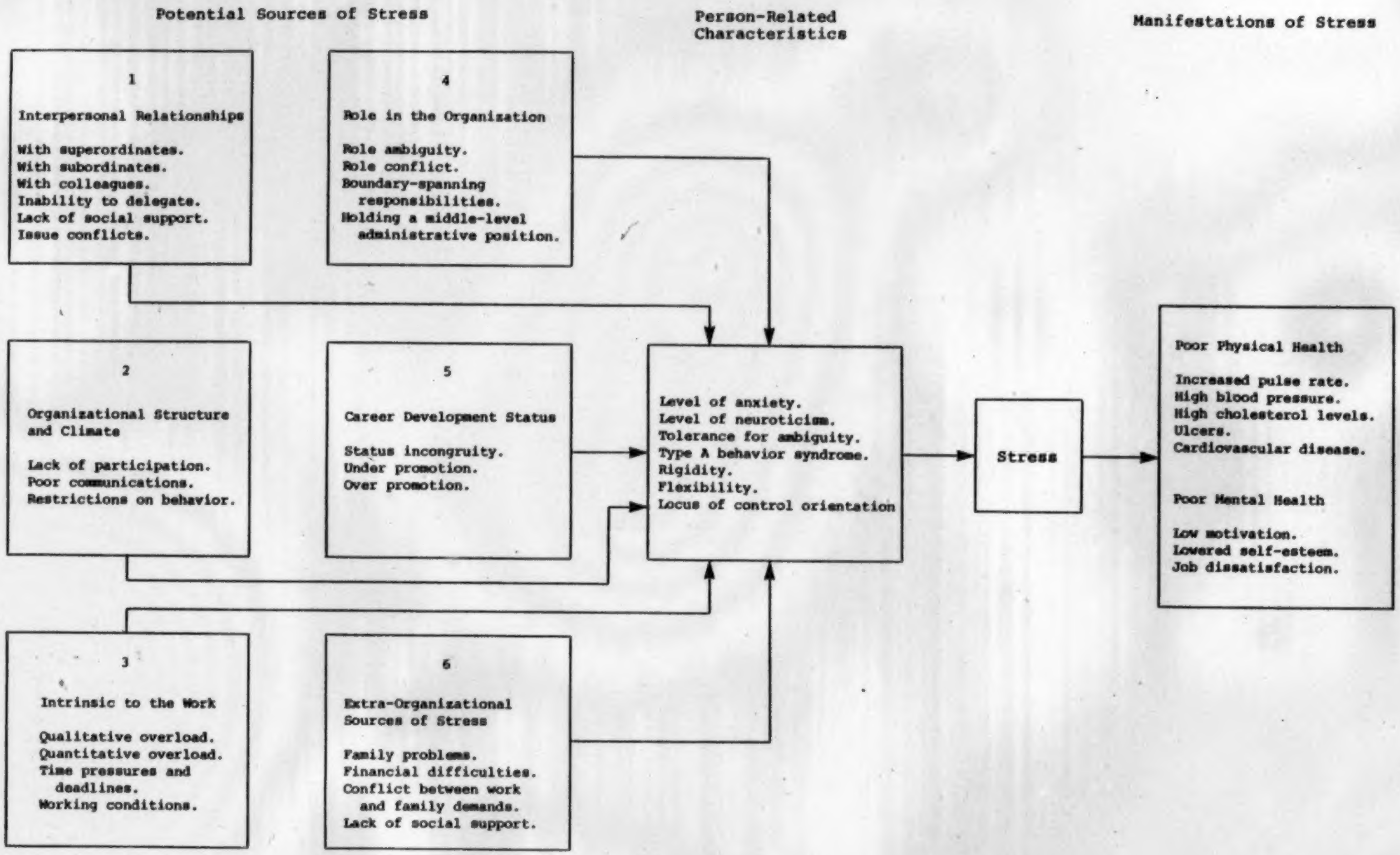

Potential Sources of Stress
Person-Related Characteristics
Manifestations of Stress
1
Interpersonal Relationships
With superordinates.
With subordinates.
With colleagues.
Inability to delegate.
Lack of social support.
Issue conflicts.
4
Role in the Organization
Role ambiguity.
Role conflict.
Boundary-spanning responsibilities.
Holding a middle-level administrative position.
2
Organizational Structure and Climate
Lack of participation.
Poor communications.
Restrictions on behavior.
5
Career Development Status
Status incongruity.
Under promotion.
Over promotion.
3
Intrinsic to the Work
Qualitative overload.
Quantitative overload.
Time pressures and deadlines.
Working conditions.
6
Extra-Organizational Sources of Stress
Family problems.
Financial difficulties.
Conflict between work and family demands.
Lack of social support.
Level of anxiety.
Level of neuroticism.
Tolerance for ambiguity.
Type A behavior syndrome.
Rigidity.
Flexibility.
Locus of control orientation
Stress
Poor Physical Health
Increased pulse rate.
High blood pressure.
High cholesterol levels.
Ulcers.
Cardiovascular disease.
Poor Mental Health
Low motivation.
Lowered self-esteem.
Job dissatisfaction.

Figure 2.2. The Person-Environment Fit Model of Stress (Adapted from Marshall and Cooper, 1979:50).

individual is contingent upon the individual's perception of the stressor. Differences in perception are a function of such "person-related" characteristics as: "level of anxiety," "level of neuroticism," "tolerance for ambiguity," and the "Type A behavior syndrome." Gmelch (1977:12) proposed in a similar model of stress that individual differences in perceptions of stress are influenced also by such factors as: past experience of success or failure in dealing with a similar stressor, the amount of information available, the perceived importance of the situation, individual personality, temperament, constitutional ability for handling tension and anxiety, and the degree of personal control that the individual perceives.

In the "person-environment fit" model, sources of stress at work and external to the organization have been usefully listed. These include: (1) interpersonal relationships, (2) organizational structure and climate, (3) aspects intrinsic to work, (4) the role of the individual in the organization, (5) career development status, and (6) several sources of extra-organizational stress.

The model does not draw a clear distinction between responses to stress (e.g. anxiety, increased blood pressure, absenteeism from work) and consequences of stress (e.g. cardiovascular disease, mental ill health). Marshall and Cooper (1979:50) have chosen to combine "responses to stress" which are the short-term effects, and "consequences of stress" which are the long-term effects of stress experiences into a general category which they label "manifestations of stress."

The Model of Teacher Stress

Although the Kyriacou and Sutcliffe (1978a:3) model of stress has been proposed for teachers it is readily applicable as a model of educational administrator stress. The model serves as the conceptual framework for this study because (1) it is sufficiently general, (2) it incorporates current approaches to stress, and (3) it is a synthesis of other models of stress. The Kyriacou and Sutcliffe (1978a:3) model of stress is illustrated in Figure 2.3.

In the model an important distinction is drawn between potential occupational sources of stress (stressors) and actual occupational stressors. Actual stress occurs only if the individual perceives the potential stressors as threatening to well-being or self-esteem. Kyriacou and Sutcliffe (1978a:4) explain further that stress results if the individual perceives an imbalance between demands and ability to cope under circumstances where failure has important consequences for the individual. Potential occupational stressors that have been appraised as constituting a threat are termed "actual occupational stressors" in the model.

Kyriacou and Sutcliffe (1978a:4) explain that an individual's perception and appraisal of demands may be dependent upon such individual characteristics (box 7) as personality, higher-order needs, ability to cope with demands, and beliefs and values.

Coping mechanisms are directed by the individual to deal with those sources of stress which are perceived as constituting a threat to the individual's well-being or self-esteem. The nature of the coping mechanism adopted is determined partly by individual characteristics.

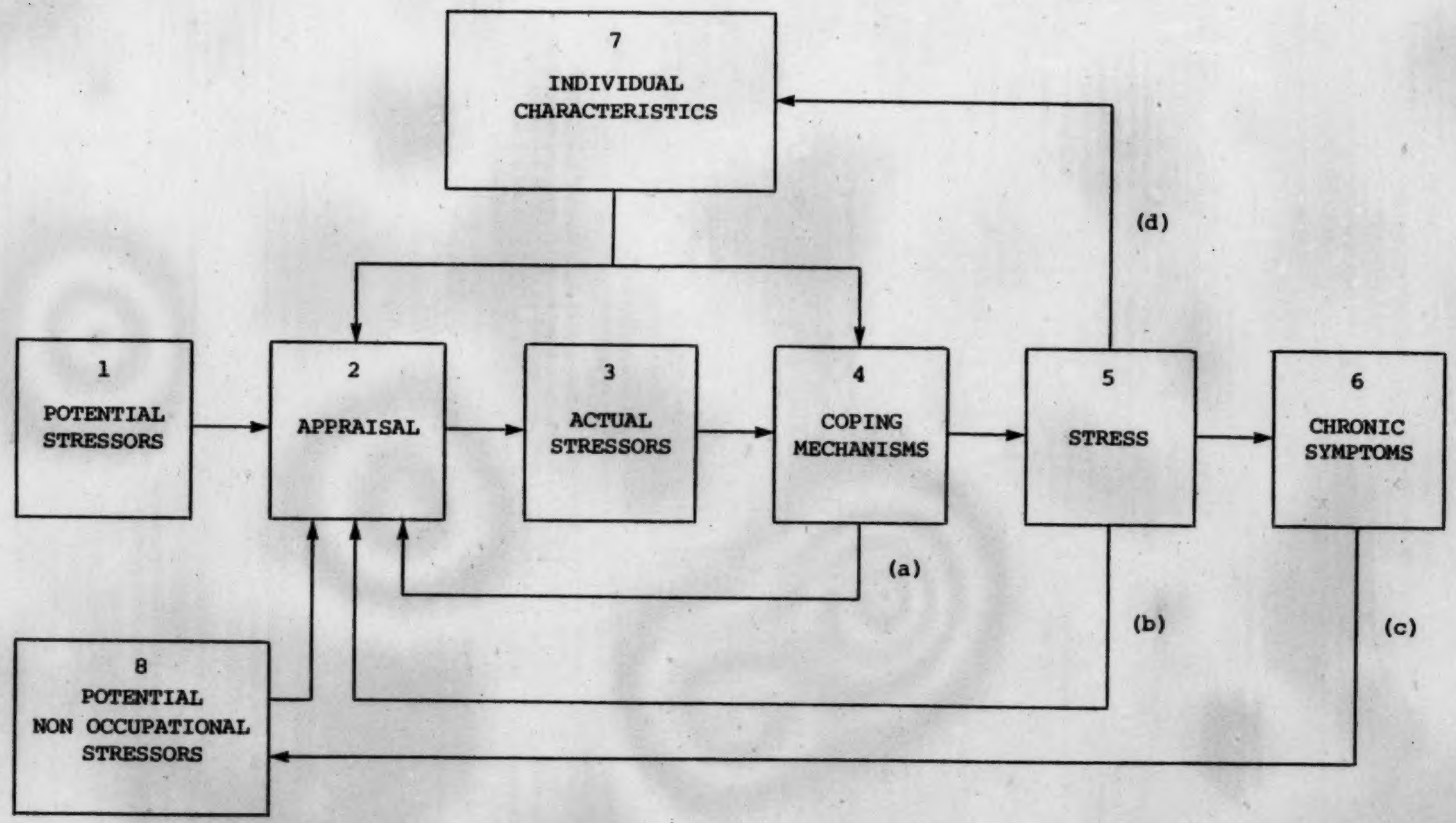

7
INDIVIDUAL CHARACTERISTICS
(d)
1
POTENTIAL STRESSORS
2
APPRAISAL
3
ACTUAL STRESSORS
4
COPING MECHANISMS
5
STRESS
6
CHRONIC SYMPTOMS
(a)
(b)
(c)
8
POTENTIAL NON OCCUPATIONAL STRESSORS

Figure 2.3. A Model of Teacher Stress (Adapted from Kyriacou and Sutcliffe, 1978a:3).

Kyriacou and Sutcliffe (1978a:4) support Lazarus (1966) by stating that stress is conceptualized as being determined by the extent to which the individual appraises threat and the degree to which coping mechanisms deal effectively with stressors. Mechanisms that have been adopted by the individual to deal with actual sources of stress will influence future appraisal of potential sources of stress, as shown in feedback loop (a) of the model. An individual who is having difficulty coping and is under stress may perceive future demands as further threats to well-being or self-esteem, as shown in feedback loop (b).

This model is consistent with physiological models in the sense that it shows that continued exposure to the physiological and biochemical changes that accompany stress may lead to psychosomatic symptoms (e.g. peptic ulcers) and to more chronic symptoms such as coronary heart disease and mental ill health. Feedback loop (c) illustrates that ill health becomes, in turn, a non-occupational stressor and may affect appraisal indirectly. Feedback loop (d) has been included in the model to show that failure to meet or cope with demands in the past may affect the individual's appraisal of his own ability to cope with new demands.

WORK-RELATED POTENTIAL SOURCES OF STRESS

The "person-environment fit" model developed by Marshall and Cooper (1979:50), and reviewed previously, provides a conceptual outline of potential organizational and extra-organizational sources of stress. Although this framework is not exhaustive, it provides a convenient guide for this review of the research and literature in relation to organizational sources of stress. The major work-related potential sources of stress which are reviewed relate to the role of the individual in an organization, to the boundary-spanning responsibility and organizational level of the individual, and to interpersonal relationships and conflicts within organizations.

Role in the Organization

Extensive research of potential organizational sources of stress has centered on the role of the individual in the organization. Within an organizational context the term "role" can be defined, according to Van Sell et al. (1981:43), as ". . . a set of expectations applied to the incumbent of a particular position by the incumbent and by role senders within and beyond an organization's boundaries." Kahn et al. (1964:4) explain that organizations depend upon the role performance of organizational members to function effectively. For any individual within an organization there is not only a sent role which consists of the expectations communicated by members of the individual's role set, but also a received role consisting of the individual's perceptions and understandings of what is sent. Sometimes organizational members are confronted with sent roles that are inconsistent or contradictory. Van Sell et al. (1981:44) add that individuals are frequently confronted with situations in which they are required to perform a role that is not clearly articulated in terms of behaviors or expected performance standards. Kahn et al. (1964), in their seminal research into the relationship between organizational roles and stress, described the former situation as "role conflict" and the latter as "role ambiguity."

Role Conflict

An organizational member's role set consists of all those individuals and groups who are associated with the organizational member's role in the organization. An incumbent's role set is dependent in some way upon his performance and, therefore, role set members develop expectations about the manner in which the incumbent should perform his role. Miles and Perreault (1976:21-22) state that role conflict has been defined as ". . . the degree of incongruity or incompatibility of expectations communicated to a focal person by his/her role senders." Miles and Perreault (1976:22) identify four types of role conflict as:

> (a) "Person-role conflict": the extent to which role expectations are incongruent with the orientations or values of the role occupant.
> (b) "Intersender conflict": the extent to which one or more role expectations from one role sender oppose those from one or more other role senders.
> (c) "Intrasender conflict": the extent to which two or more role expectations from a single role sender are mutually incompatible.
> (d) "Overload": the extent to which the various role expectations communicated to a role occupant exceed the amount of time and resources available for their accomplishment.

An additional form of role conflict was described by Kahn et al. (1964:19) as "inter-role conflict" which occurs when role pressures stemming from membership in one organization are incompatible with role pressures arising from membership in another group.

In research conducted by Kahn et al. (1964), Rizzo et al. (1970), House and Rizzo (1972), French and Caplan (1973), Hamner and Tosi (1974), Beehr et al. (1976), and Miles (1976b) evidence was generally found to support the hypothesis that role conflict was positively related to unfavorable personal outcomes such as: tension, anxiety, job dissatisfaction, and propensity to leave the organization.

In addition, Schwab and Iwanicki (1982) report that role conflict among a group of school teachers was associated, to some extent, with burnout symptoms of "emotional exhaustion" and "depersonalization." However, many of the reported relationships have not been consistent across all studies. For instance, Kahn et al. (1964), Tosi (1971), French and Caplan (1973), Rizzo et al. (1970), Beehr et al. (1976), and Miles (1976b) reported that role conflict was positively related to dysfunctional outcomes such as: job dissatisfaction, tension, anxiety, low confidence in the organization, and propensity to leave. By contrast, Rizzo et al. (1970), House and Rizzo (1972), and Hamner and Tosi (1974) reported that role conflict was not significantly associated with job dissatisfaction, but role conflict was positively related to tension and anxiety. Furthermore, Tosi and Tosi (1970) found a positive relationship between role conflict and dissatisfaction of teachers, but no relationship between role conflict and tension, or anxiety.

Hamner and Tosi (1974) argued that the apparent differences in findings arise because of differences in the nature of the samples studied. The Rizzo et al. (1970), House and Rizzo (1972), and Hamner and Tosi (1974) studies were of individuals in managerial roles. Hamner and Tosi (1974) suggested that managers may perceive role conflict as a "given" in an executive role; hence, because conflict was expected, it did not produce dissatisfaction and a desire to leave the organization.

Szilagyi et al. (1976:274) contend that studies in the area of role conflict are limited because data were derived from self-report measures and that these analyses were generally correlational in nature. Furthermore, many of the correlations were found to be statistically significant at the "low-to-moderate level."

Miles and Perreault (1976:21) contend that role conflict appears to be associated with organizational linking roles. These are roles that involve the integration of activities across and within organizational boundaries. Lipham and Hoeh (1974:132-133) provide some support for the apparent importance of role conflict in boundary-spanning roles when they summarize sources of role conflict in the principalship:

> All institutional roles, particularly those in public institutions, are subject to numerous sources and types of disagreement or conflict. But few seem to be so fraught with conflict potential as that of the public school principal. The major types of role conflict in the principalship are as follows: (1) inter-role conflict or disagreement between two or more roles simultaneously fulfilled by the principal -- from the principal "wearing many hats," (2) inter-reference-group conflict or disagreement between two or more reference groups in their expectations for the role of the principal -- "the man in the middle," (3) intra-reference-group conflict or disagreement within a reference group in their expectations for the role of the principal -- "caught in group crossfire," . . . .

Vetter (1976:15) provides some additional evidence for the pervasiveness of role conflict in the principalship by maintaining that, "Because the principal occupies the apex position in the school, he has a greater variety and more role senders than others in the school." Lack of agreement among role senders creates a pattern of expectations of the principal which contains incompatibilities and fails to take account of the coping abilities of the principal, hence causing the principal to experience stress.

Role Overload

Kahn (1969:36) explains that an important form of role conflict is "overload," which is conceptualized as ". . . conflict among legitimate tasks, manageable singly but not simultaneously." A distinction is drawn in the literature between "quantitative overload" and "qualitative overload." Quantitative overload can occur when role senders hold legitimate and consistent work expectations of a role incumbent; however, it is difficult for the focal person to complete the work within a given period of time. Qualitative overload can occur when legitimate and consistent work demands require abilities, skills, and knowledge which are beyond those held by the role incumbent. According to Sales (1969:326), French and Caplan (1973:41-43), Kahn (1973:8), Burke and Belcourt (1974:55), and Miles and Perreault (1976:22), stress is experienced as a consequence of both quantitative and qualitative overload. Furthermore, in a recent study of role stress and satisfaction of Iowa high school principals, Domian (1980:110) reported that quantitative role overload was negatively correlated ($r = -0.567$) with job satisfaction.

Role Ambiguity

Van Sell et al. (1981:44) claim that role ambiguity has not been elaborately conceptualized in the literature. They (1981:44) add that role ambiguity has generally been defined as ". . . the degree to which clear information is lacking regarding (a) the expectations associated with a role, (b) methods for fulfilling known role expectations, and/or (c) the consequences of role performance." Kahn (1973:9) adds that "Role ambiguity is conceived as the discrepancy between the amount of information a person has and the amount he requires to perform his role adequately." Hence, when role expectations are clear and consistent, the organizational member will be relatively confident about his role requirements. By contrast, experiences of tension, anxiety, and stress are predictably associated with experienced role ambiguity. Burke and Belcourt (1974:55) add that role ambiguity ". . . should increase the probability that a person will be dissatisfied with his role, will experience anxiety, will distort reality, and will perform less effectively."

Kahn et al. (1964:94) explain that role ambiguity is prevalent in organizations probably because of the complexity of organizations, the rapid pace of technological change, and the pervasiveness of certain managerial practices that foster role ambiguity. Gmelch(1977:31) claims that educational administrators also experience role ambiguity. According to Gmelch (1977:31): "All too often, administrators are left unclear about the scope of their responsibilities; they simply do not know where their job begins and where it ends."

However, Van Sell et al. (1981:51) conclude, after reviewing a considerable number of studies on the role sender-focal person relationships, that inconsistency is evident across studies of the relationships between role ambiguity and individual response variables. For instance, studies by Kahn et al. (1964), Rizzo et al. (1970), House and Rizzo (1972), and Miles (1976b) found that role ambiguity was positively associated with job dissatisfaction, tension, anxiety, and perceived performance ineffectiveness. By contrast, Tosi and Tosi (1970), and Tosi (1971) reported no relationship between role ambiguity and tension, or anxiety.

Studies of the relationships between role ambiguity and personal outcomes, such as job dissatisfaction, tension and anxiety, are generally stronger than those obtained for role conflict (Kahn et al., 1964; Rizzo et al., 1970; House and Rizzo, 1972; Hamner and Tosi, 1974; Miles, 1975). The convergence of evidence suggests, according to Miles (1975:338), that ". . . role ambiguity may be more pervasive than role conflict in its 'effects' on personal outcomes." Several individual and organizational factors have been examined as potential moderators of the relationship between role ambiguity and conflict on the one hand and individual dysfunctional outcomes on the other. According to Van Sell et al. (1981:56) the best documented moderators of the role-outcome relationships are the organizational level of responsibility and boundary-spanning responsibility of an individual.

Organizational Level of Responsibility

Hamner and Tosi (1974) suggested that role conflict has a greater impact on the behavior of individuals at lower levels of an organization than role ambiguity, while role ambiguity has more stressful consequences for individuals in higher organizational roles. Hamner and Tosi (1974) explained that lower level roles are usually reasonably clearly specified, but employees in such positions are likely to face conflicting role demands from others. By contrast, upper-level managerial roles involve solving unstructured problems with limited clarity; hence, the impact of ambiguity upon stress is more significant than the impact of conflicting role expectations.

Support for the Hamner and Tosi (1974) finding was provided in a relatively recent study of the relationships between organizational level of responsibility, role conflict and ambiguity, and personal outcomes by Drory (1981:139) who stated that the results indicated that ". . . while the relationship between role conflict and job attitudes remains stable across organizational levels, role ambiguity is considerably more strongly related to job attitudes in the higher level." Furthermore, it appears that upper echelon roles involve less role conflict and ambiguity than middle-level managerial roles. Support for this contention is provided by Kahn et al. (1964:382) who state that:

> The often heard assertion that the lower levels of supervision are subjected to the greatest conflict is not born out by the data. Rather, there is a curvilinear relationship in which maximum conflict occurs at what might be called the upper-middle levels of management. We interpret this in part as a consequence of the still unfilled mobility aspirations of middle management, in contrast to the better actualized aspirations of top management people.

Caldwell and Doremus (1978:1) also support the view that the role of middle-level administrators is filled with conflict and ambiguity:

> In virtually no other administrative position is an individual required to interact with both the management and worker levels and asked to produce and maintain a sensitive balance between the enforcement of organizational expectations and the fulfillment of individual worker needs.

Caldwell and Doremus (1978:1) maintain that the school principal's role is as a middle manager in education. It is argued that school principal role conflict has grown with the emergence of more militant teacher associations and public sector collective bargaining legislation. Support is provided by Griffiths (1977:3) who observed in the United States that "School principals, long considered men-in-the-middle, have been deprived of virtually all authority, and now only the most astute survive through a finely tuned political acumen."

Boundary-Spanning Responsibility

According to Miles (1976c:173) a boundary-spanning role involves coordination of interdisciplinary or cross-functional activities both within and across organizational boundaries. An incumbent of a boundary role is faced with numerous role senders whose demands are potentially difficult to predict and control. Miles and Perreault (1976:21) maintain that:

> . . . role conflict appears to be associated with organizational linking roles, whether they involve the integration of activities across intra- and interorganizational boundaries or up and down the chain of command.

This claim has support from Kahn et al. (1964:103) who found a positive relationship between the number of contacts that boundary spanners made with role senders outside the organization and the degree of role conflict that they experienced. As the frequency of contacts increased, the role incumbent felt increasingly pressed by the demands of individuals and groups outside and inside the organization.

Rogers and Molnar (1976:600) provided some indication that boundary-spanning roles may be particularly stressful in educational organizations because (1) such organizations have multiple goals, (2) administrators must assign priorities for different goals, and in so doing, (3) they have to contend with expectations from outside the organization as well as from within. Crowson and Porter-Gehrie (1980:65) described the school principalship as ". . . the pivotal exchange point, the most important point of connection between teachers, students, and parents on the one hand and the educational policy-making structure -- superintendent, school board, and taxpayer

-- on the other." The needs, problems, and expectations of the local community flow through the principal's office along with problems and expectations that accompany the implementation of policies which have been developed by the school system policy-making structure.

The general findings discussed above are also supported by Whetton (1978:256) who states that, "It has been shown rather conclusively that boundary spanners do indeed experience more role conflict than non-boundary spanners." However, Whetton (1978:256) maintains that there is less conclusive evidence to support the traditional position that boundary spanners report lower levels of job satisfaction because they are exposed to more conflicting expectations than non-boundary spanners. It appears that increased access to information flowing into an organization, freedom from close supervision, and greater task variety, which are available to boundary spanners rather than non-boundary spanners, serve as compensatory benefits.

Interpersonal Relationships and Conflicts

Several studies of school administrator stress have reported "interpersonal relationships and conflicts" as major sources of stress for administrators (Swent and Gmelch, 1977; Warner, 1980; Jankovic, 1981; Koff et al., 1980). The following findings are illustrative of situations which belong to this general category of potential sources of stress.

Koff et al. (1980:1) tentatively concluded from a national study of elementary and secondary school principals in the United States that conflicts between administrators and teachers were perceived by administrators as most stressful. Items within this category of conflicts were listed by Koff et al. (1981:3,4) as: "forcing the resignation or dismissal of a teacher," "dealing with unsatisfactory performance of professional staff," "preparing for a teachers' strike," "refusal of a teacher to follow policies," and "forced staff reduction." These findings are reasonably consistent with findings of a study of the sources of stress for 243 Australian high school principals by Jankovic (1981). Major reported sources of stress for principals in the Jankovic (1981:159-160) study related to the interaction of the principal with teachers in some manner; for example: "confronting an unsatisfactory teacher," "having to reprimand teachers," "tolerating a poor or incompetent teacher," "dealing with uncompromising teacher union members," and "having to resolve conflicting educational demands from staff." Furthermore, in a study of the prevalence, sources, and symptoms of stress, and coping strategies among a group of Iowa school administrators, Warner (1980:110) reported that major sources of stress for elementary and secondary principals were: "parent-school conflicts," "making decisions which affect the lives of others," and "evaluating staff members' performance." Some additional support was provided by Swent and Gmelch (1977:20-21) who found in a study of Oregon school administrator stress that resolving parent-school conflicts was ranked the third most significant source of stress by secondary school administrators. All administrators found evaluating staff and making decisions that affect the lives of colleagues, staff members, and students to be most stressful.

Cooper and Marshall (1976:19) maintain that a major source of stress at work relates to the nature of relationships between administrators and their superordinates, subordinates, and colleagues. Poor relations have been defined by French and Caplan (1973:48) as ". . . those which include low trust, low supportiveness, and low interest in listening to and trying to deal with the problems that confront the organization member." Studies by Kahn et al. (1964), and French and Caplan (1970) found that mistrust between work colleagues was positively related to high role ambiguity, inadequate communications, and experiences of stress.

Ivancevich and Matteson (1980:127) claim that interpersonal conflict ". . . is a part of the fabric of organizational life, ..." Support for this view is provided by Nebgen (1978:1) who claims that conflicts in school situations are common. Nebgen (1978:1) adds that in the school context "Unanimity seldom exists among teachers, administrators, parents, and students."

Conflict is defined by Nebgen (1978:1) as ". . . any situation in which two or more parties perceive that their goals are incompatible." The goals actually may not be incompatible, but if involved parties misperceive the objective state of affairs then conflict may still occur. Ivancevich and Matteson (1980:127) distinguish between three categories of intragroup conflict: "role conflict," "issue conflict," and "interactional conflict." Role conflict is defined by Ivancevich and Matteson (1980:127) as existing ". . . when the expectations associated with two or more positions that a person occupies are incompatible with one another or when mutually incompatible expectations are associated with a single position." According to Ivancevich and Matteson (1980:128), issue conflict involves disagreements between group members about the most appropriate method to solve a problem. Such conflict may be caused by differences in perceptions, personal values, levels of experience, or sources of information. Ivancevich and Matteson (1980:128) accept that issue conflicts can have positive organizational effects but they (1980:128) contend that intense issue disagreements can create stress experiences for individuals who are involved.

Ivancevich and Matteson (1980:128) suggest that the distinction between conflict and disagreement is largely dependent upon the perceptions of group members. Hence, Ivancevich and Matteson (1980:128) maintain that ". . . interactional conflict exists when members perceive antagonism toward each other." Intragroup conflicts create stress for employees and result in adverse behavior and physiological reactions. Ivancevich and Matteson (1980:129) add that ". . . squabbles, harsh words, and nitpicking that accompany conflict make going to work a stressful activity." Most people prefer harmonious work settings that facilitate discussions of personal and work-related issues. Dysfunctional conflict frustrates such interpersonal interactions and can result in individual experiences of stress.

Nebgen (1978:1) describes three types of conflict situations that may occur in the work role of a school administrator: "subordinate conflict" may arise between the administrator and an individual or group over whom the administrator has authority; "superordinate conflict" may arise between the administrator and persons or groups who have authority over the administrator, and "lateral conflict" may arise with groups who have authority equal to that of the administrator. Nebgen (1978:2) maintains that stressful conflicts arise because of ". . . communication problems, structural factors within the organization, human factors, and conflict-promoting interactions." Communication difficulties arise because of distortions or misperceptions on the part of the sender or the receiver, and because of semantic problems. Structural factors that are implicated by Nebgen (1978:2) as being related to conflict include organizational size, organizational reward systems, and differential power distributions between groups. The larger the school, Nebgen (1978:2) suggests, the higher the rate of conflict intensity. Nebgen (1978:2) also claims that some reward systems encourage independent performance of individuals and functional groups, hence conflict increases. Conflict-promoting interactions can occur at all levels of interpersonal and intergroup relations within the organizational setting of the school, according to Nebgen (1978:2). Such interpersonal conflicts involve competition, domination, and/or provocation. In a competitive interaction each party is attempting to gain something that the other wants. Such conflicts, Nebgen (1978:3) states, are generally dysfunctional for a school organization and for administrators who become involved.

MODERATING FACTORS OF PERCEPTIONS OF STRESS

According to the Kyriacou and Sutcliffe (1978a) model of stress, individual differences in responses to potential sources of stress are determined by the degree to which such situations are perceived and appraised as threatening to well-being or self-esteem. Beehr and Newman (1978:683) draw a distinction between perception and appraisal. The perception process is essentially descriptive in nature, and the appraisal process is primarily evaluative because it involves a comparison of the perceived abilities, personal qualities, and resources to ascertain the amount of stress inherent in the situation. Chan (1977:93) notes that appraisal, as the forerunner of the stress reaction, is conceptually the intervening process in psychological stress analysis.

Baum et al. (1981:7) contend that the appraisal of a potential source of stress depends upon such factors as ". . . attitudes towards the stressor, prior experience of it, knowledge of its consequences, and evaluation of its apparent costs." They (1981:9) add that self-esteem and motivational states are probably linked with individual differences in the level of confidence and coping strategies of individuals faced with disruptive events. Fineman (1979:326) noted that individual needs, values, abilities, and expectations influence perceptions of stress. Smith and Brehm (1981:1138) suggest that it might be possible that the Type A behavior pattern can influence attribution or perception processes. Furthermore, Chan (1977:100) proposed that relatively well researched personality variables like self-esteem, internality-externality, and anxiety may be influential in explaining individual differences in perceptions of, and reactions to, stressful stimuli.

Studies by Lefcourt (1976), Anderson (1977), Kilpatrick et al. (1974), and Kyriacou and Sutcliffe (1979b) provide support for the proposition that "locus of control orientation" moderates individual perceptions of, and responses to, potential sources of stress. Individuals who have a strong generalized belief that they can control their own destiny -- "internal" locus of control orientation -- are less likely to appraise their environment as threatening, and hence would experience less stress than individuals who have a strong generalized belief that their destiny is essentially the result of luck, chance, fate, or actions of powerful others -- "external" locus of control orientation (Kyriacou and Sutcliffe, 1979b:227).

Clearly, a considerable number of potential factors influencing individual perceptions of stress have been identified in the literature. It is not possible in this review to discuss all possible factors. Thus only intervening factors deemed relevant to the delimited aspects of the study are reviewed. These include: Type A behavior, need strength and motivation, and situational moderators.

Type A Behavior Pattern

The Type A behavior pattern has been identified in the literature as a factor that may moderate individual perceptions of stress and responses to stress (Caplan and Jones, 1975; Howard et al., 1977; Marshall and Cooper, 1979; Pittner and Houston, 1980; Smith and Brehm, 1981). The Type A behavior syndrome has also been linked, by Friedman and Rosenman (1974), with coronary heart disease. In this section a review of the literature related to the nature of Type A behavior is presented.

Type A and Type B behavioral characteristics.

According to Friedman and Rosenman (1974:4), the Type A behavior pattern ". . . is a particular complex of personality traits, including excessive competitive drive, aggressiveness, impatience, and a harrying sense of time urgency." Zyzanski and Jenkins (1970:781) add that Type A individuals are characterized by hyperalertness, restlessness, explosiveness of speech, polyphasic thinking (thinking simultaneously about a number of matters), facial tension, feelings of being under the

the pressure of time, and the challenge of responsibility. Persons with this behavior pattern tend to be highly ambitious, achievement and recognition oriented, deeply committed to their work, and frequently successful. Glass et al. (1974:127) state that previous research indicates that time-conscious Type A individuals work near maximum speed, have difficulty slowing down, and overreact emotionally when required to slow down. Howard et al. (1977:826) add that often the Type A individual has chronic conflicts with one group of persons either by preference or necessity.

By contrast, Type B individuals are relatively free of the extreme Type A behavioral characteristics. Jenkins et al. (1967:371) describe the Type B individual as relaxed, more easy going, and seldom impatient. Such individuals take more time to enjoy avocational pursuits; they are not easily irritated, and work steadily without an overburdening feeling of being driven by a lack of time. Type B individuals are seldom preoccupied with social achievement, and they are less competitive than Type A individuals in occupational and avocational pursuits. The Type B individual moves and speaks in a slower and more smoothly modulated style than the Type A individual.

Type A behavior is not considered to be a discrete typology, but rather represents a continuum of behaviors from fully developed Type A to pure non-Type A or Type B. Hence, Type A and Type B behaviors represent extremes of a bipolar continuum that is probably normally distributed (Jenkins, 1975:18). One method of assessing Type A behavior is by structured interview. As a result of the interview, using the Friedman and Rosenman (1974) typology, individuals are classified as Type A1, Type A2, Type B3, Type B4, or Type X.

Individuals classified as Type A1 manifest most Type A behaviors. At the other extreme Type B4 individuals appear to be entirely free of Type A characteristics. Jenkins et al. (1967:372) report that the bulk of the population can be classified into intermediate categories Type A2 and Type B3 depending on whether Type A or Type B qualities are more predominant. Type X individuals have an equal representation of Type A and Type B behavioral characteristics.

Environmental conditions eliciting Type A behavior. Matthews (1982:293) contends that the Type A pattern is not considered in strict terms to be a trait, rather ". . . it is a set of overt behaviors that is elicited from susceptible individuals by an appropriately challenging environment." Friedman and Rosenman (1974:68) explain that Type A behavior represents:

> . . .the reaction that takes place when particular personality traits of an afflicted individual are challenged or aroused by a specific environmental agent, the results of this reaction (that is, the behavior pattern itself) may not be felt or exhibited by him if he happens to be in or confronted by an environment that represents no challenge.

They (1974:68) emphasize that ". . . for Type A behavior pattern to explode into being, the environmental challenge must always serve as the fuse for this explosion." Glass et al. (1974:137) support this contention by suggesting that ". . . being Type A amounts to a predisposition to behave in certain specified ways, providing there is an appropriate eliciting situation such as uncontrollable stress."

The importance of stressful stimuli in eliciting Type A behavior in susceptible individuals has been underlined by Howard et al. (1977) in a study of 236 managers. The study examined the relationship between Type A behavior and certain work patterns and job characteristics. They (1977:834) suggest that personality and job conditions combine to produce behavior which, in its extreme, appears related to coronary heart disease. Howard et al. (1977:834) found that "high growth companies," in particular, tend to foster managerial work environments that elicit Type A behavior in "susceptible individuals." Howard et al. (1977:833) also identified "supervisory responsibility," "feelings of competition," "excessive work loads," and "conflicting demands" as variables which may be responsible for eliciting Type A behavior. However, they (1977:834) admit that still to be defined are the characteristics and personality of the "susceptible individual."

An additional problem, according to Howard et al. (1977:835), is that it is still not clear whether certain work conditions elicit Type A behavior in susceptible individuals or whether Type A individuals create Type A work conditions of competitiveness and excessive work loads. Some suggestion exists in the literature of a third possibility: that Type A individuals are selected to managerial positions because they exhibit Type A qualities which may be desired for such positions. Payne (1975:22) supports this latter possibility by claiming that much traditional thinking in personnel management proceeds with the aim of getting the right person for the right slot, and "In this instance of getting A-type persons into work situations where lots of A-type work is needed and vice versa for the B-types." Another approach to the meaning of the Type A behavior pattern, according to House (1974:22), ". . . asserts that under potentially stressful objective conditions Type A persons are more prone to perceive stress and manifest increases in heart disease or its risk factors."

Need Strength and Motivation

Research by Beehr et al. (1976) and Jackson et al. (1981) revealed that the status of an individual's higher-order need strength influences, to some extent, perceptions and appraisals by the individual of potential sources of stress. The concept of "higher-order need strength" was described by Maslow (1954). According to Maslow (1954), individual motivation can be explained in terms of a hierarchy of personal needs. A satisfied need is not a motivator of behavior. Higher-order needs become activated and serve as motivators when lower-order needs are fulfilled. At the lowest level are "physiological needs," then follow "safety needs." Once these basic needs have been fulfilled "social needs" become important motivators; these include the need for belonging, for association, for acceptance by fellows, and for giving and receiving friendship. Above social needs -- in the sense that they do not become motivators until lower needs are reasonably satisfied -- are "ego needs." These needs relate to the individual's self-esteem, self-confidence, independence, achievement, and competence.

Beehr et al. (1976:42) propose that:

> People with strong higher order needs are, by definition, more likely to derive satisfaction from performing well on challenging tasks than are people with weaker higher order needs.

Beehr et al. (1976:45) reported from their study that role overload, role ambiguity, and non-participation in decision-making correlated positively with respondents' reports of job dissatisfaction, fatigue, and tension. The relationships were moderated, to some extent, by higher-order need strength. Correlations were more pronounced, according to Beehr et al. (1976:46), for those individuals with stronger higher-order needs.

Further support for the moderating effect of need strength and motivation on perceptions of stress was provided by Styles and Cavanagh (1977:76) who reported that stress was evoked in the role of teacher by:

(i) the need for enhanced status and respect.
(ii) the lack of "stroking" from appropriate people in positions of authority.
(iii) the feeling that in spite of hard work and all one's effort, advancement is not as quick as expected.

In a study of school principal motivation, Iannone (1973:261) reported that ". . . principals, as a group, are highly achievement oriented." They derive satisfaction from their work achievements and from the recognition that they receive for such achievements. From the results of the study, Iannone (1973:261) suggests that ". . . principals seem to have two dominant needs: achievement and recognition for achievement."

Ivancevich and Matteson (1980:177) provide support for the findings of Iannone (1973) by suggesting that needs which are of greatest significance as moderators of stress in the framework of organizations are those related to success and achievement. Ivancevich and Matteson (1980:177) add that individuals who have a high level of "need for achievement" attempt to excel, surpass others, make prolonged efforts to accomplish goals, and are often highly competitive. Work plays a central role in the lives of such individuals and, consequently, they tend to create conditions of work overload. Because of their strong need for personal achievement, these individuals tend to lack the ability or willingness to delegate some of their responsibilities to others. Hence, competitive and ambitious individuals create additional organizational sources of stress for themselves.

Individuals who exhibit intensely the Type A behavior syndrome, it appears, have high levels of achievement motivation. Glass (1977b:164) found, for instance, that Type A individuals are ". . . hard driving individuals who are motivated by the desire for success." House (1974:21) provided support for this contention by stating that the central element of Type A behavior is the "desire for social achievement" which is reflected in such characteristics as impatience, ambition, competitiveness, and aggression. The strong sense of time urgency results in perceptual distortion of time. Type A's work near maximum capacity, irrespective of the presence or absence of time deadlines, because of their extreme achievement orientation (Glass et al., 1974). Furthermore, Type A individuals suppress subjective feelings of fatigue to achieve success (Carver et al., 1976).

Situational Moderators

Baum et al. (1981:16) maintain that individuals with a wealth of coping resources such as social support, positive perceptions of control, and successful prior experiences in coping with a particular situation are less likely to appraise similar situations as threatening and, as a consequence, experience less stress. Social support is identified also by Chan (1977:96) as a situational moderator of perceptions and appraisals of stress. Kyriacou (1981:59) equates social support generally with ". . . simply having someone to talk to about one's problems." According to Chan (1977) and Kyriacou (1981) the availability of social support influences an individual's perceptions of his ability to cope with potentially stressful demands, and hence has a direct effect on the appraisal of stress associated with such demands.

Other potential situational moderators of perceptions and appraisals of stress -- age, sex, years of education, organizational position, experience, health status, and propensity to leave the organization -- have been investigated in several studies (Kyriacou and Sutcliffe, 1977b, 1978b, 1979a; Jankovic, 1981; Williams, 1981). The findings have been mixed. Kyriacou and Sutcliffe (1978b:166) reported that for teachers ". . . there is very little association between self-reported teacher stress and the biographical characteristics of sex, qualifications, age, length of teaching experience, and position held in the school." Jankovic (1981) found there was no association between experience as a principal, sex, years to retirement and self-reported principal stress. A very small positive correlation ($r = 0.156$) was reported between age and principals' perceptions of overall work-related stress. Williams (1981:209) reported that sex, age, years of education for salary purposes, years of teaching experience, number of years in present school, present position, major grade level taught, major teaching assignment, and number of teachers in school were not related to overall work-related stress. However, Williams (1981:209) found that:

> . . . teachers who reported having experienced work-related physical illness, those who reported personal life stress, and those who planned to leave the profession or were undecided about leaving all registered significantly higher means on overall work-related stress than those who reported no work-related physical illness, no personal life stress or who planned to retire from a career in education.

In a study of organizational stress among 113 Canadian, upper-middle managers, Rogers (1977:270) concluded that ". . . managerial perceptions of stress were not significantly related to age, education level, or type of industry."

The weak and inconsistent associations between situational variables and perceptions of overall work-related stress indicated to Kyriacou and Sutcliffe (1977b:79, 1978b:166) and Jankovic (1981:160) that personality and behavioral characteristics of individuals may be the more important determinants of differences between individuals in perceptions and appraisals of stress. Williams (1981:224) provided some support for this contention when she suggested that ". . . it would appear that personality variables not included in this study may be important in how teachers view sources of stress."

THE NATURE OF COPING

The Dimensions of Coping

Kyriacou (1981:55) defines "coping" as ". . . behaviour intended to reduce the experience of stress . . . ." Pearlin and Schooler (1978:3) add to this definition by asserting that the concept of coping refers to any response to potential sources of stress that serves to ". . . prevent, avoid, or control emotional distress." Lazarus (1966, 1974) has maintained that two ways of coping with stress exist: "direct-action processes" and "palliative activities."

Direct-action coping techniques encompass all individual behaviors, whether effective or ineffective, that are directed by the individual to deal with potential sources of stress. Palliative coping activities are aimed at changing the individual's appraisal of stress associated with situations and demands. Lazarus (1974:330) explains that palliative forms of coping are ". . . focused on possible ways of reducing the affective, visceral or motor disturbances which are distressing the person, as opposed to attempts to master the environmental transaction itself on which the stress emotion and its distressing accompaniments depend." Palliative activities include "intrapsychic processes" such as denial, detachment, and attention deployment; and "somatic-oriented devices" such as relaxation training, biofeedback procedures, drugs, and other such devices which are employed in an effort to moderate bodily concomitants of stress reactions (Lazarus, 1974:321).

Lazarus (1974:331) maintains that individuals employ a wide variety of coping devices throughout their lives. The choice of a particular strategy is dependent upon the interaction of personal characteristics, the nature of environmental demands, and the individual's appraisal of these demands. Furthermore, Lazarus (1974:331) states that ". . . there is evidence that a coping strategy which works in one context, or for one type of person, might have damaging consequences in another . . . ."

Responses that are essentially behavioral and directed towards altering the nature of sources of stress are called "coping mechanisms" by House (1974:14). Psychological responses which serve primarily to alter an individual's appraisal of sources of stress are called "defenses." Pearlin and Schooler (1978:2) are essentially in agreement with both House (1974) and Lazarus (1966, 1974); however, Pearlin and Schooler (1978:2) provide an additional dimension to coping typologies by claiming that:

> The protective function of coping behavior can be exercised in three ways: by eliminating or modifying conditions giving rise to problems; by perceptually controlling the meaning of experience in a manner that neutralizes its problematic character; and by keeping the emotional consequences of problems within manageable bounds.

Pearlin and Schooler (1978:5) explain that the three major types of coping are distinguished from each other by the nature of their respective functions. "Responses that modify the situation" are like Lazarus' (1974) direct-action strategies because these are directed at altering or eliminating the actual sources of stress. In situations where direct-action is not successful in eliminating the sources of stress, the impact of the problem may nevertheless be buffered, according to Pearlin and Schooler (1978:6), by ". . . responses that function to control the meaning of the problem." Hence, the threat associated with a particular situation is determined, to some degree, by the individual's cognitive appraisal of the experience. By cognitively neutralizing the threat associated with particular situations it is possible for the individual to reduce stress experience.

The third type of coping style does not function to alter the nature of the stressor or to create congenial appraisals of the stress-provoking situation. Rather, this type of coping functions, according to Pearlin and Schooler (1978:6), more for the control of stress itself after it has emerged. Individuals use this coping style to adapt to existing stressful situations and to keep the emotional consequences within manageable bounds. In addition, Pearlin and Schooler (1978:7) suggest that:

> . . . this strategy brings together a number of orientations to life-problems: denial, passive acceptance, withdrawal, an element of magical thinking, a hopefulness bordering on blind faith, and belief that the avoidance of worry and tension is the same as problem solving.

Not all studies, according to Kyriacou (1981:56), fall neatly into Lazarus' (1966, 1974) conceptual framework of coping. A number of studies have identified "seeking social support" as a common coping strategy (Burke and Belcourt, 1974; Dewe et al., 1979; Kyriacou, 1980c).

Social Support

Kyriacou (1981:58) notes that some authors regard seeking social support as essentially a palliative coping technique. The view is taken by Kyriacou (1981:58) that social support underlies both palliative and direct-action coping techniques. Kyriacou (1981:58) adds that social support underlies a whole range of coping actions, and that major benefits which accrue from social support can be grouped into three categories. Firstly, social support provides the opportunity for individuals to receive advice from trusted colleagues about direct-action techniques that could be employed to deal with stressors. Secondly, by discussing conflicts and problems which have grown out of proportion, with colleagues, individuals can develop a more appropriate perspective of the situation. Kyriacou (1981:58) asserts that, "Getting things in perspective is perhaps the most important of the psychic palliative techniques." Thirdly, social interactions with colleagues provide an outlet for tension that has built up during a stressful period. Cooper and Crump (1978:422) also reveal that evidence now exists that an individual's work group and social group may provide effective social support which alleviates the effects of stress.

Ivancevich and Matteson (1980:127) indicate that not all individuals prefer or value group support. Some individuals do not experience an easing of stress experiences from the social support provided by co-workers. This raises questions about the appropriateness and effectiveness of certain coping styles for particular individuals in various situations.

Coping Effectiveness

Pearlin and Schooler (1978:8) assert that the effectiveness of coping behavior cannot be judged solely on how well it purges problems from individual's lives. Rather, coping behavior should be judged on how well it prevents potential sources of stress from actually becoming stressful. Therefore Pearlin and Schooler (1978:8) define coping efficacy as ". . . the extent to which a coping response attenuates the relationship between the life-strains people experience and the emotional stress they feel."

Baum et al. (1981:12) assert that:

> Coping is more likely to be successful when the stressor is one that is familiar, is definite in time and space, and is one for which the individual has knowledge of the efficacy of previous coping strategies and responses.

Pearlin and Schooler (1978:6) maintain that even though direct-action coping styles represent the most direct method of coping with potential stressors, individuals often do not use such strategies for several possible reasons. Firstly, individuals have to recognize the situation as the source of their stress before they can direct action toward its modification. Secondly, even when sources of stress are identified, individuals may lack the experience or knowledge necessary to modify or eliminate these stressors. Finally, it is not always possible to change directly the nature of some sources of stress.

Newman and Beehr (1979:39) contend that the effectiveness of coping strategies is determined by the interplay of individual and situational factors, and that there appears to be no single coping style that can be recommended for all individuals in all situations.

They (1979:39) explain that an individual may cope differently with the same source of stress on different occasions, and different individuals may cope differently with the same stressor.

In a study of the effectiveness of certain defense mechanisms, Morris and Engle (1981) investigated the use of cognitive coping strategies in alleviating the stressfulness of a testing situation and the relation of these strategies to performance and test anxiety. The study evaluated the effectiveness of the following six different coping mechanisms: "intellectualization" -- being objective, analytic, and theorizing abstractly about the situation; "rationalization" -- providing plausible though fictitious reasons for behaviors or attitudes; "isolation" -- taking a detached attitude to avoid a confrontation; "denial" -- refusing to accept the stressfulness of the situation; "resignation" -- being resigned to and enduring the situation; and "preoccupation-with-self" -- ruminating about stressful aspects of the situation. Morris and Engle (1981:165) report that "Rationalization and isolation were associated with better performance, preoccupation and resignation with higher anxiety and poorer performance, and denial with lower anxiety."

The findings of a study of coping actions used by comprehensive school teachers in Britain led Kyriacou (1980b:12) to offer the following generalization:

> Taking considered actions is likely to be the best way of coping since it is aimed at dealing with the sources of stress and if successful the sources of stress themselves will be removed.

However, Kyriacou (1980b:12) adds that in situations where dealing with the sources of stress is likely to be unsuccessful, then too much reliance on direct-action coping may be counter productive. Whether an individual seeks social support or chooses to use defensive coping styles in situations where direct-action is not effective is an individual matter, according to Kyriacou (1980b:12). Some individuals find greater comfort in talking to others about their sources of stress, while others prefer to forget about their problems.

The effectiveness of direct-action and defensive coping mechanisms is contingent, it seems, upon the mix of situational and individual characteristics. The Type A behavior syndrome has been implicated in the literature as an individual characteristic that influences the nature of coping styles which are chosen by individuals.

Predominant Coping Strategies of Type A and Type B Individuals

Glass et al. (1974:137) have suggested that the Type A behavior pattern is ". . . a coping style aimed at maintaining control over potentially uncontrollable events." The maintenance of control over demands is of paramount importance to Type A individuals, according to Burnam et al. (1975:76). Hence, Type A's accelerate the pace at which they live to achieve such mastery.

From a study of Type A and Type B individuals on a treadmill test machine, Glass (1977a:180) reports that it appears that Type A individuals tend to work closer to the limits of their endurance than Type B individuals. Yet, even as Type A individuals work near capacity, they rate their level of fatigue as significantly lower than Type B individuals. Glass (1977a:180) concludes that:

> This tendency toward fatigue suppression -- or at least public denial of fatigue -- may be understood in terms of the achievement-oriented character of the Type A. Denial or suppression of fatigue has instrumental value for A's because it aids in their struggle for attainment of desired goals . . . .

Dembroski and MacDougall (1978:30) found evidence to support the proposition that Type A subjects possess a greater desire than Type B subjects to exercise personal control over a difficult situation. In a highly threatening work situation, Type A subjects displayed a significantly greater preference to work alone. Dembroski and MacDougall (1978:31) suggest that this preference to work in solitude under stress is consistent with at least three characteristics of the Type A behavioral pattern:

> (a) heightened concern for exercising personal control over a difficult situation, which is especially consistent with low dependency needs and low desire to be in a leader-directed group, as is (b) a low threshold for irritation when others interfere with attempts to master a task, and (c) concern with achievement, a characteristic which suggests a desire to avoid the possibility of failure in the presence of others.

Dembroski and MacDougall (1978:32) conclude that the strong preference of Type A individuals for working alone while under pressure may impose stress upon such individuals beyond what the situation requires by increasing individuals' job loads and responsibilities. Although there is no direct evidence regarding the willingness of Type A individuals to delegate responsibility or engage in participative decision-making, Dembroski and MacDougall (1978:32) suggest that Type A individuals may behave in a manner that imposes heavier work loads and pressure on themselves. Stress may be increased because such behavior reduces opportunities for help and support of co-workers.

As part of a study of effective and ineffective coping techniques, Howard et al. (1975) compared coping techniques of Type A individuals with Type B individuals. Type B individuals made more use of "compartmentalizing work and non-work activities," and "talking through with spouse." By contrast, Type A individuals employed more frequently the technique of "changing to a different work activity." This technique was assessed by Howard et al. (1975:320) as the least effective of the ten techniques examined because it was associated with the highest number of reported stress symptoms. For the other seven coping techniques examined, there were no significant differences between Type A and Type B individuals with respect to the frequency of use of these techniques.

Research Studies of Coping with Occupational Stress

In an attempt to identify coping actions that teachers actually use, Kyriacou (1980c) conducted an exploratory survey study among a small sample of comprehensive school teachers in Britain. The questionnaire contained a list of thirty-three coping actions derived largely from a study, reported by Dewe et al. (1979), of coping with occupational stress among white-collar workers. The four most frequently used coping actions were reported by Kyriacou (1980c:58) as: "try to keep things in perspective," "try to avoid confrontations," "try to relax after work," and "try to take some immediate action on the basis of your present understanding of the situation."

The thirty-three coping actions listed on the questionnaire were subjected to a principal components analysis. Three rotated factors accounting for 36.7 percent of the total variance were extracted. Factor I was labelled "Express feelings and seek support" by Kyriacou (1980c:59). It consists of items that involve the expression of feelings about work-related stress, and with seeking advice and social support. Factor II was labelled "Take considered actions." It consists of items concerning individual reflection on the situation and taking actions to deal with the sources of stress. Kyriacou (1980c:60) explains that Factor II seems to draw together a number of the more frequently used coping actions. The items which load on Factor III -- "Think of other things" -- appear to be related to attempts to focus attention away from the source of stress to other things. Kyriacou (1980c:60) concludes tentatively that ". . . these three factors may reflect the three main ways in which teachers attempt to cope with occupational stress."

In a survey study of 1,156 Oregon school administrators, Swent and Gmelch (1977) identified coping techniques that were used by administrators to deal with work-related stress. Administrators were asked to list strategies or techniques that they had found successful in overcoming stress in their work roles. Swent and Gmelch (1977:27) categorized these into three general areas which they labelled: "physiological activities," "cognitive control," and "acquisition of interpersonal and management skills." Physiological activities included jogging, competing in athletic activities, general exercise programs, yoga, meditation, and hobbies. Also included within physiological techniques were activities in which administrators purposely separated themselves from their work environments to relax, such as having a retreat in the mountains or establishing social friendships outside the educational environment. Cognitive activities related to having positive attitudes and supportive philosophies of life to help ease tensions created by the work role. Swent and Gmelch (1977:28) included the following as examples of cognitive activities: "approaching all problems with an optimistic attitude," "sharing problems with colleagues, spouses and other family members," "establishing realistic goals that recognize the limitations of one's self and the impossibility of solving all problems," and "taking time off during the day for quiet meditation." The final category of coping techniques -- "acquisition of interpersonal and management skills" -- identified by the Oregon administrators included administrative skills in time management, interpersonal relations, personnel management, team management, delegation of administrative responsibilities, and participation of subordinates in problem solving.

In a study of 137 managers and managerial trainees employed by the Federal Government of Canada, Burke and Belcourt (1974) investigated the relationships between coping behavior and specific sources of stress. Burke and Belcourt (1974:62) reported that 19 categories of coping behavior were identified from a content analysis of all open-ended responses. Sixty-five percent of all total coping responses fell into the following five categories: "talking to others," "working harder and longer," "changing to an engrossing non-work or play activity," "analyzing the situation and changing the strategy of attack," and "withdrawing physically from the situation." Burke and Belcourt (1974:67) claim also that some steps toward the development of a contingency model of coping responses were taken in their research. Certain demographic characteristics were associated with particular coping responses. For instance, younger respondents and better educated respondents were more likely to discuss their situation with others than were older respondents and less educated respondents. Furthermore, particular stressful situations were associated with certain coping responses. For example, role overload was dealt with effectively by analyzing the situation and engaging in problem solving.

In a research report of methods of coping with work-related stress, Dewe et al. (1979:69) claim that in the extensive literature on stress ". . . the way in which people cope with stress has until recently been relatively neglected." They (1979:69) suggest that the style or styles of coping employed by an individual ". . . may depend on the source of stress, the options available and the individual's personality and circumstances." To test this, Dewe et al. (1979) conducted three sequential preliminary studies in which data were gathered on the methods individuals actually employ to cope with work-related stress.

The first study by Dewe et al. (1979:74) used an open-ended interview format to identify the range of coping behaviors in a group of 34 middle managers in the transport industry. Two questions were asked. The first sought to identify coping responses that were used by managers to deal with particular stressful work situations. The second sought to identify coping responses that were used by managers to deal with their general feelings of stress associated with their work role. In response to the first question, 33 coping behaviors emerged and of these 26 coping behaviors -- 78 percent -- were categorized as direct-action, and 7 coping behaviors -- 22 percent -- were categorized as palliatives. In response to the second question, 42 coping behaviors emerged and of these, 14 -- 33 percent -- were direct-action, and 28 -- 67 percent -- were palliatives. Dewe et al. (1979:74) conclude from the first study that:

> It seems, on the basis of these findings, that specific events lead to direct action while the more general, and therefore possibly non-specific, feelings of stress lead to action in terms of palliatives. The use of palliatives may be the only possible response where the specific source of stress cannot be identified.

The combination of these two types of question therefore seems to generate a wide range of coping behaviours.

The second study by Dewe et al. (1979:74) asked the same questions of 40 clerks, administrators, and supervisors employed in one organization (the nature of the organization was not specified by Dewe et al., 1979). This study also revealed many more direct-action coping strategies than palliatives to the specific question, and many more palliatives than direct-action strategies to the general question.

In the third study, Dewe et al. (1979:76) included 47 coping strategies in a questionnaire which was completed by 51 clerks, supervisors, and administrators from the same organization as in the second study. The coping strategies included in the questionnaire were based on responses obtained from the previous two studies. Respondents were asked to consider each coping strategy in the questionnaire and to indicate on a five-point scale how frequently they used each action ". . . to cope with the pressures at work." Dewe et al. (1979:76) comment that, "The general nature of the question, with its focus on feelings of stress rather than specific sources of stress, may have biased it towards the palliatives." However, Dewe et al. (1979:76) explain that, "In the event this proved not to be the case."

Of the 47 items, 20 were identified by Dewe et al. (1979:76) as direct-action and 27 as palliatives. Dewe et al. (1979:78) reported that the following coping responses were used most frequently:

1. Let people know exactly where they stand.
2. Consider a range of plans for handling the situation --set priorities.
3. Forget work when finished for the day.
4. Try to find out more about the situation -- seek out additional information.
5. Try to reassure yourself that everything is going to work out all right.

6. Make sure people are aware you are doing your best.
7. Try to see the humour of the situation.
8. Follow proper channels of procedure to cover yourself.
9. Try to take some immediate action on the basis of your present understanding of the situation.
10. Think objectively about the situation and keep your feelings under control.
11. Don't let the problem go until you have solved it or reconciled it satisfactorily.
12. Talk about the situation with someone else at work.

The 47 coping strategies in the questionnaire were subjected to a principal components analysis by Dewe et al. (1979:77). Four factors extracted accounted for 43.7 percent of the variance. The first factor was labelled "Sensible task-oriented coping behaviour." Items in this factor represented direct-action strategies plus actions aimed at preventing subsequent repercussions. The second factor was described by Dewe et al. (1979:78) as ". . . an expression of feelings coupled with a search for social support at work." The third factor described out-of-work activities -- physical activity, non-work activities, family life -- to ease work-related stress. The fourth factor was described by Dewe et al. (1979:79) as ". . . a mainly passive attempt to ride the situation, ignoring the sources and effects of stress for the time being." These last three factors were predominantly palliative, according to Dewe et al. (1979:82), but quite distinct in nature. In conclusion, Dewe et al. (1979:82) comment that the results of their study highlight the reported importance of these three different types of palliative coping behavior which ". . . do little or nothing to tackle the underlying problem."

THE STATE OF THE LITERATURE AND RESEARCH

This review of the literature has revealed that conceptual models of the stress process are developed reasonably well. Stress is experienced by an individual if the individual perceives and appraises potential sources of stress as threatening to well-being or self-esteem under circumstances where failure has important consequences for the individual. The perception and appraisal process is influenced by certain individual and situational factors and, also, by the degree to which coping mechanisms and social support structures are available to the individual. The review of literature and research has highlighted the following short-comings in knowledge and understanding about the stress process:

1. Potential sources of stress have been identified and described in the literature; however, actual sources of stress for school administrators, particularly in an Alberta context, have not been identified and described.

2. The general conceptualization of stress coping processes as "palliative" or "direct-action" appears to be reasonably developed. However, few research studies have identified and described specific coping behaviors used by school principals to deal with work-related stress. Furthermore, assessments by principals of the relative effectiveness of coping processes have not been sought.

3. It has been revealed in the literature and in Kyriacou and Sutcliffe's (1978a) model of stress that an individual's experience of overall work-related stress is associated to some degree with (1) the extent to which the individual experiences stress associated with

work-related situations, (2) the extent to which the individual successfully employs coping behaviors, and (3) individual and contextual factors. However, specific work-related situations, coping behaviors, and individual and contextual factors that either reduce or contribute to principals' experiences of overall work-related stress have not been identified, described, and explored in an Alberta context. Clearly there is need for research that provides a more complete, holistic, and contextual portrayal of factors that are associated with the variance in principals' experiences of overall work-related stress.

SUMMARY

In this chapter a review was presented of the literature and research in relation to (1) conceptual models of stress, (2) work-related potential sources of stress, (3) moderating factors of perceptions of stress, and (4) the nature of stress coping behaviors and strategies.

Conceptual definitions of stress were initially examined in this chapter. It was found that definitions of stress tend to evolve from one of three conceptual perspectives: the "engineering" model, the "physiological" model, and the "transactional" model. Three models of the stress process were examined. The first, by Ivancevich and Matteson (1980), provided an integrative perspective of various approaches to research into the stress process. The second model, which was named the "person-environment fit" model by Marshall and Cooper (1979), provided a conceptual guide to potential sources of stress. Kyriacou and Sutcliffe's (1978a) model of teacher stress was described and adopted as the conceptual framework for this study because (1) it is sufficiently general to serve equally well as a model for educational administrator stress, (2) it incorporates both the "transactional" and "physiological" perspectives of stress, and (3) it is based on current approaches to research into the stress process.

Literature related to potential sources of stress for principals was reviewed under the following major headings: role in the organization, role conflict, role overload, role ambiguity, organizational level of responsibility, boundary-spanning responsibility, and interpersonal relationships and conflicts. It was found that even though a considerable volume of research has been conducted in relation to role conflict and ambiguity, findings have been contradictory and correlations have generally been low. It appears that major potential sources of stress for principals relate to two broad aspects of the role of principals: boundary-spanning responsibilities, and interpersonal relationships and conflicts. However, further research in an Alberta context is clearly needed to identify and describe actual sources of stress for principals.

Factors which have been identified in the literature as potential moderators of perceptions of stress were examined in the third major section of this chapter. The Type A behavior syndrome has been implicated in the literature as an important determinant of perceptions of stress and coping responses to stress. However, it is clear from the review of literature that many questions in regard to the importance of Type A behavior as a moderator of stress experience and coping remain unanswered, and that further research into this construct, particularly for principals, is justified. The findings of several recent studies of potential situational moderators of perceptions of stress were also examined. It appears that such variables as sex, age, and qualifications account for very little, if any, of the variation among individuals in their perceptions of stress.

In the fourth major section of this chapter, a review of the literature related to the general nature of coping was provided. The major dimensions of coping were described as "direct-action processes" and "palliative techniques." Some evidence was found in the literature to support the proposition that social support structures underpin a whole range of coping behaviors. The effectiveness of coping behaviors and strategies is contingent, it seems, upon the mix of situational and individual characteristics. An individual characteristic which appears to be related to the style of coping an individual employs to deal with work-related stress is the Type A behavior syndrome. In the last part of the section on the nature of coping, a review was presented of some exploratory studies of coping behaviors and strategies which have been employed by teachers, school administrators, and middle-level managers.

The chapter concludes with a brief outline of the short-comings in knowledge and understanding, derived from the literature and research, about the stress process in general and stress of principals, in an Alberta context, in particular.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

This chapter is divided into three major sections: (1) research design, (2) research methodology, and (3) instrument development and validation.

RESEARCH DESIGN

Purpose of the Study

The purpose of the study was to identify, explore, and describe work-related situations, coping behaviors used by principals, and other factors associated with the variance in principals' experiences of overall work-related stress.

Specific Objectives

To fulfill the study purpose it was necessary to satisfy the following objectives:

1. To identify and describe work-related sources of stress for a group of principals.

2. To identify and describe coping behaviors used by principals and to report principals' perceptions of the relative effectiveness of coping behaviors.

3. To identify, explore, and describe work-related situations, coping behaviors used by principals, and individual and contextual factors that either reduce or contribute to principals' experiences of overall work-related stress.

Nature of the Study

The study was designed to be both descriptive and exploratory in nature. Selltiz et al. (1959:50) state that a descriptive study is designed to ". . . portray accurately the characteristics of a particular individual, situation, or group . . ." and ". . . to determine the frequency with which something occurs or with which it is associated with something else . . . ." An exploratory study serves to achieve new insights into a phenomenon in order to formulate more precise research problems or to develop hypotheses. The present study is descriptive in that (1) it provides as complete, holistic, and contextual portrayal as possible of sources of stress for principals; (2) it identifies and describes coping behaviors used by principals; and (3) it provides as complete, holistic, and contextual portrayal as possible of factors that either reduce or contribute to principals' experiences of overall work-related stress. The study is exploratory in that it is designed to gain new insights into (1) work-related sources of stress, coping behaviors used by principals, and individual and contextual factors, and (2) the association of these factors with principals' experiences of overall work-related stress.

Research Problems

The major purpose of the study and the three related specific objectives were achieved through research directed at an examination of three major research problems, each of which included several related sub-problems. The sub-problems were derived from the conceptual framework of the study and the review of the literature.

Research problem 1: work-related sources of stress. The first objective of the study was to determine the extent to which principals had experienced stress associated with work-related situations; to seek an estimate of the frequency of occurrence of specified work-related situations; and to develop detailed descriptions of work-related situations that were perceived as very or extremely stressful by a considerable number of principals. Hence, the following problem was investigated:

> *To what extent have principals in the study group experienced stress associated with work-related situations?*

In seeking to answer problem 1, the following sub-problems were investigated:

> *1.1. How frequently has each specified work-related situation occurred, and how stressful has each work-related situation been for principals when it has occurred?*
>
> *1.2. What is the rank order of the specified work-related situations from the most stressful to least stressful?*
>
> *1.3. What relationships exist between the frequency of occurrence of the specified work-related situations and principals' perceptions of the stress associated with these situations?*
>
> *1.4. What descriptive factors can be extracted from a factor analysis of principals' perceptions of stress associated with each specified work-related situation?*
>
> *1.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and principals' perceptions of the stress associated with work-related factors on the other?*
>
> *1.6. What work-related situations are identified and described by principals as very or extremely stressful and why are these situations so stressful?*

Research problem 2: coping behaviors and effectiveness. The second objective of the study was to determine the extent to which principals use certain coping behaviors to deal with work-related stress and to seek assessments from principals of the relative effectiveness of coping behaviors which they employ. Hence, the following problem was investigated:

> *To what extent do principals in the study group employ certain coping behaviors, and what are principals' assessments of the relative effectiveness of these coping behaviors?*

In seeking to answer problem 2, the following sub-problems were investigated:

> *2.1. How frequently has each specified coping behavior been used by principals, and what are the assessments of the relative effectiveness of coping behaviors by principals who have used these coping behaviors?*
>
> *2.2. What is the rank order of the specified coping behaviors from most effective to least effective?*
>
> *2.3. What relationships exist between the frequency of use by principals of the specified coping behaviors and principals' assessments of the relative effectiveness of these coping behaviors?*
>
> *2.4. What descriptive factors can be extracted from a factor analysis of principals' assessments of the relative effectiveness of each specified coping behavior?*
>
> *2.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and the frequency of use by principals of coping factors on the other?*

Research problem 3: overall work-related stress and associated factors. The third objective of the study was to identify, explore, and describe work-related situations, coping behaviors used by principals, and individual and contextual factors that either reduce or contribute to principals' experiences of overall work-related stress. In this respect the study was designed to gain new insights into why some principals report the role of principal as not stressful or mildly stressful while others report the principalship as being very stressful. Hence the following problem was investigated:

What factors are associated with principals' experiences of overall work-related stress?

In seeking to answer problem 3, the following sub-problems were investigated:

3.1. To what extent do principals experience work-related stress?

3.2. Which of the work-related situations are the best predictors of principals' perceptions of overall work-related stress?

3.3. Which of the coping behaviors used by principals are the best predictors of principals' perceptions of overall work-related stress?

3.4. To what extent are differences in principals' perceptions of overall work-related stress associated with:
  - *3.4.1. -Individual factors: Type A behavior, Factor S, (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-Driving and Competitive)?*
  - *3.4.2. -Structural factors: type of school and size of school?*
  - *3.4.3. -Professional factors: experience in present school and experience in total?*
  - *3.4.4. -Contextual factors: staff cohesiveness and level of staff support for the principal?*

3.5. What individual and contextual factors are identified by principals as having reduced their experiences of overall work-related stress?

3.6. What individual and contextual factors are identified by principals as having contributed to their experiences of overall work-related stress?

3.7. What Edmonton Public School System factors are identified by principals as being associated with their experiences of overall work-related stress?

Research Variables and Relationships

The model of stress developed by Kyriacou and Sutcliffe (1978a) provided the conceptual framework for the study. This conceptualization of the stress process was reviewed in the previous chapter.

This study was delimited to a description and exploration of (1) work-related sources of stress for a group of principals, (2) coping behaviors for dealing with stress, (3) individual and contextual factors associated with principals' perceptions of overall work-related stress. A diagrammatic representation of the factors described and relationships explored is shown in Figure 3.1. These may be summarized as follows:

1. Work-Related Sources of Stress

These were identified from:

(a) principals' perceptions of the stress associated with specified work-related situations, and

(b) principals' descriptions of work-related situations that they found to be very or extremely stressful.

2. Coping Behaviors and Effectiveness

These were identified from:

(a) principals' assessments of the extent to which they use specified coping behaviors, and

(b) principals' assessments of the extent to which they found specified coping behaviors to be effective.

3. Relationships between Work-Related Sources of Stress and Individual Characteristics

These were assessed from an investigation of the associations between perceived sources of stress and selected individual characteristics of principals.

4. Relationships between Coping Behaviors and Individual Characteristics

These were assessed from an investigation of the associations between coping behaviors used by principals and selected individual characteristics of principals.

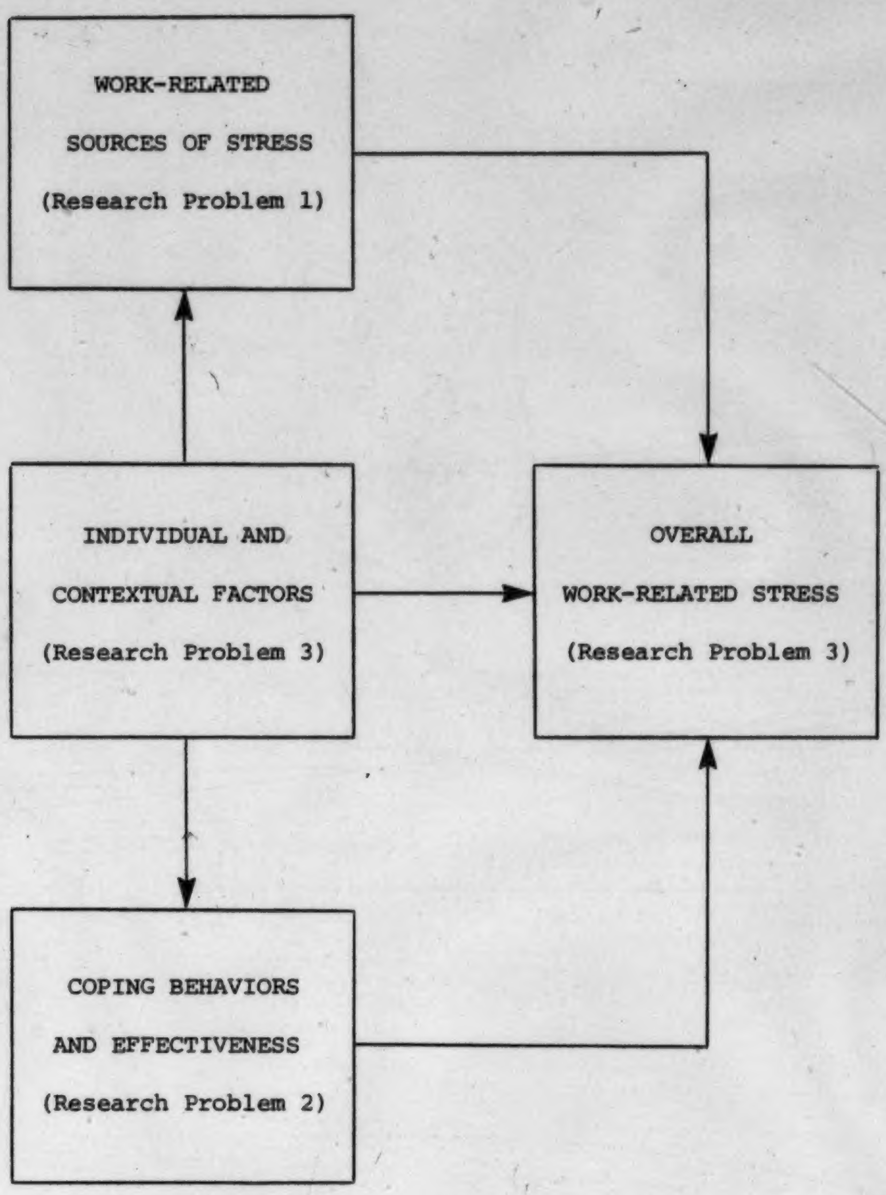

WORK-RELATED
SOURCES OF STRESS
(Research Problem 1)
INDIVIDUAL AND
CONTEXTUAL FACTORS
(Research Problem 3)
OVERALL
WORK-RELATED STRESS
(Research Problem 3)
COPING BEHAVIORS
AND EFFECTIVENESS
(Research Problem 2)

Figure 3.1. Diagrammatic Representation of Factors Described and Relationships Explored.

5. Overall Work-Related Stress

This was assessed from principals' self-reports of the stress that they perceived to be associated with the role of principal in general.

6. Overall Work-Related Stress and Associated Factors

These were assessed from:

(a) an exploration of the association between perceived sources of stress and overall work-related stress,

(b) an exploration of the association between coping behaviors used by principals and overall work-related stress, and

(c) an exploration of the associations between individual and contextual factors and principals' perceptions of overall work-related stress.

Respondents

A number of issues were considered before the selection of the respondent group was made. First, it was felt by the researcher and his supervisor that a richer understanding of stress in the principalship would be derived from an intense study of a small sample of principals rather than from a survey study of a large number of principals. Second, it was anticipated that, with a more intense study, each respondent would complete a 45 minute questionnaire and most would participate in a semi-structured interview lasting approximately one hour. Hence, the anticipated time commitment from respondents to the study was quite considerable. Third, it was felt by the researcher and his supervisor that personal contact by the researcher with respondents and an expression of genuine interest in respondents by the researcher would encourage more sincere cooperation from respondents than would be obtained from an impersonal survey study. Fourth, because of the researcher's commitment to a more personal approach to the study it was deemed desirable to keep within reasonable bounds travelling times by the researcher to interviews with respondents.

The respondents were 50 elementary, elementary-junior high, junior high, and composite high school principals from the Edmonton Public School District. These voluntary respondents were obtained in the following manner:

The researcher made contact with three associate superintendents of the Edmonton Public School Board who were responsible for the administration of schools in three zones of the Edmonton Public School District. The three zones incorporated most public schools in the eastern and southern areas of Edmonton, and a large proportion of the public schools in the western areas of Edmonton. These zones were considered by the associate superintendents to be reasonably representative of all six zones in the Edmonton Public School District because they included areas in which enrollments were declining, areas in which enrollments were relatively stable, and areas in which enrollments were increasing. The purpose and nature of the study were explained to the three associate superintendents. Each associate superintendent was highly supportive of the study.

One of the associate superintendents invited the researcher to a zone meeting with principals to explain the nature, purpose, design, benefits, and time requirements of the study. At the meeting the researcher invited elementary, elementary-junior high, junior high, and composite high school principals to indicate their individual willingness to participate in the study. Twenty-four of the 25 principals present at the meeting agreed to participate in the study.

Another superintendent also invited the researcher to a zone meeting of principals. The next principals' meeting was scheduled too late in April for the purposes of the study. As an alternative arrangement the associate superintendent wrote a letter to each principal explaining the nature, purpose, design, benefits, and time requirements of the study. Principals who were willing to participate were asked to telephone the associate superintendent's secretary. Twelve principals from this zone agreed to participate in the study.

The third associate superintendent did not want the researcher to come to a zone meeting of principals but provided, instead, the researcher with the names of nine principals who were willing to participate in the study. An additional five principals who were mainly from central and northern zones of the Edmonton Public School District agreed to participate in the study at the request of the researcher.

The frequency and percentage frequency distributions of elementary, elementary-junior high, junior high, and composite high school principals in both the Edmonton Public School District and the study group are presented in Table 3.1. To compare both distributions a Chi Square statistic was computed. The Chi Square of 1.57 with three degrees of freedom was not significant. This indicates that the distribution of elementary, elementary-junior high, junior high, and composite high school principals in the study group was not significantly different from the distribution of principals throughout the Edmonton Public School District.

Table 3.1

Frequency and Percentage Frequency Distributions of Elementary, Elementary-Junior High, Junior High and Composite High Schools in the Edmonton Public School District and the Study Group

	Edmonton District		Study Group	
School Type	Number	Percent	Number	Percent
Elementary	118	69[a]	32[b]	64
Elementary-Junior High	16	9	6	12
Junior High	25	15	8	16
Composite High	12	7	4	8
Totals	171	100	50	100

[a] This means that 69 percent of the principals in the Edmonton Public School District were principals of elementary schools.

[b] This means that 32 elementary school principals from the Edmonton Public School District were in the study group.

Chi Square = 1.57

Degrees of Freedom = 3

No significant difference

RESEARCH METHODOLOGY

Qualitative and Quantitative Methods

A questionnaire and a semi-structured interview schedule were used for the collection of data. These provided both quantitative and qualitative data. Turner (1981:243) contends that, "The quantitative and the qualitative modes of research, however, are not polar opposites, and there is no need to pursue one to the exclusion of the other, ..." The combination of quantitative and qualitative methodologies in this study served as the basis for triangulation in the sense described by Jick (1979). According to Jick (1979:603-604), triangulation can:

> . . . capture a more complete, holistic, and contextual portrayal of the unit(s) under study. That is, beyond the analysis of overlapping variance, the use of multiple measures may also uncover some unique variance which otherwise may have been neglected by single methods. It is here that qualitative methods, in particular, can play an especially prominent role by eliciting data and suggesting conclusions to which other methods would be blind. Elements of the context are illuminated. In this sense, triangulation may be used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge.

Jick (1979:609) maintained also that ". . . qualitative data are used as the critical counter-point to quantitative methods." In this sense, Jick (1979:609) adds, the researcher can obtain qualitative data to illuminate behavior in the context of prominent situational factors.

Permission to Conduct the Research

Permission to conduct the study was obtained from the Division of Field Services, the University of Alberta and from the Edmonton Public School System.

The researcher wrote to all principals who had volunteered to participate in the study. In the letter the researcher thanked principals for offering to participate in the study; re-affirmed that strict anonymity and confidentiality were guaranteed, that results of the study and a personal profile would be made available, and that the researcher would be making contact by telephone to make an appointment to conduct the study. Approximately one week after each letter was posted, the researcher telephoned principals and made appointments for April and early May, 1982.

Data Collection Procedures

Because many more principals had agreed to participate in the study than was originally anticipated, the researcher decided to limit the interview program to the first 36 principals who had agreed to participate in the study. These included the 24 principals who agreed to participate after the zone meeting of principals with the researcher, and the additional 12 principals who responded favorably to the letter which was written by one of the associate superintendents. All 50 principals who agreed to participate in the study received and completed the questionnaire.

Each of the 36 principals who were interviewed gave the researcher permission to tape record the interview. The researcher assured principals that strict anonymity and confidentiality would be maintained and that data would be reported in group form. Most interviews were conducted in each principal's office. The tape recorder was usually placed in an inconspicuous place so that it provided the least possible distraction for both the respondent and the researcher. Most interviews lasted between 40 minutes and one hour. Upon completion of the interview, the researcher presented the respondent with the questionnaire; explained how to complete each section of the questionnaire; and clarified any concerns that respondents had about the questionnaire. The researcher established with each principal a mutually convenient date to return to the principal's school to collect the completed questionnaire.

Fourteen principals completed the questionnaire but did not participate in the semi-structured interview. The researcher also visited these principals at their schools. The questionnaire was presented to each principal, whereupon the researcher explained how to complete all sections and clarified any concerns that principals had about the questionnaire. The researcher returned to each school to collect the completed questionnaire on a date that was mutually convenient for the researcher and respondent.

Upon receipt of a completed questionnaire, the researcher posted a letter to the principal thanking him/her for participating in the study. Enclosed with the letter was the principal's confidential profile on the dimensions of the Type A behavior scale; a four page review of the literature on Type A behavior; and sample profiles to help principals interpret their scores.

By mid-May, 1982 each of the 36 interviews had been completed and all of the 50 completed questionnaires had been collected from respondents by the researcher.

During April, 1983 a summary of the major findings of the study was posted to each of the 50 principals who participated in the study.

Data Analysis

As indicated previously, the nature of this study was descriptive in the sense that it sought to identify and describe work-related sources of stress for principals and coping behaviors used by principals to deal with work-related stress. The study was also exploratory in the sense that it attempted to gain new insights into factors associated with principals' experiences of overall work-related stress. Furthermore, both quantitative and qualitative data were collected for the purpose of providing more detailed descriptions of factors associated with principals' experiences of work-related stress.

Data analysis techniques which were employed reflected the descriptive and exploratory nature of the study.

Quantitative data analysis.

Descriptive statistical techniques such as means, standard deviations, and frequencies; and exploratory statistical techniques such as correlational analysis, stepwise multiple regression analysis, and factor analysis were employed for the analysis of quantitative data.

The Jenkins Activity Survey (for measurement of Type A behavior, Jenkins et al., 1979) was hand scored according to directions for hand scoring provided by the Psychological Corporation, New York. Quantitative data from sections A, B, C, and D of the questionnaire and the four sub-scale raw scores for Type A behavior, obtained from hand scoring of the Jenkins Activity Survey, were coded and transferred to computer cards for computer analysis.

Qualitative data analysis.

Each of the 36 interviews was tape recorded with the consent of the respondents. Typed transcripts of all the tape recorded interviews were produced. The content analysis of each transcript was guided by the research objectives stated at the beginning of the chapter.

Bogdan and Biklen (1982:145) state that qualitative data analysis ". . . involves working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others." *A priori* analysis categories were not employed, rather the qualitative interview data were explored with the purpose of developing analysis categories directly from the data. The analysis categories which emerged from the data were explored further with the purpose of gaining as complete, holistic, and contextual portrayals as possible of (1) work-related situations that principals perceived as very or extremely stressful, (2) factors that principals identified as reducing their experiences of overall work-related stress, and (3) factors that principals identified as contributing to their experiences of overall work-related stress.

Qualitative data: analysis of work-related sources of stress. The first question of the semi-structured interview schedule (shown in Appendix B) provided principals with the opportunity to identify and describe work-related situations that they had experienced as very or extremely stressful and to give reasons why these were so stressful.

The researcher read each transcript and coded work-related situations that were identified and described by principals as very or extremely stressful. Principals' descriptions of any particular work-related situation and what it was about the situation that made it very or extremely stressful were cut out of the transcripts and placed in a coded manila folder. Hence, any particular manila folder contained all principals' descriptions and comments related to a particular work-related situation. The contents of each manila folder were explored further with the purpose of gaining as complete, holistic, and contextual portrayals as possible of work-related situations that were spontaneously identified and described by principals as very or extremely stressful.

Qualitative data: analysis of factors that reduce stress experience. The second major question of the semi-structured interview (shown in Appendix B) sought principals' descriptions of aspects of their schools, their administrative styles, or any other factors that reduce their experiences of overall work-related stress.

The researcher read each transcript and coded factors described by principals as reducing their experiences of overall work-related stress. Principals' descriptions of any particular factor were cut out of the transcripts and placed in a coded manila folder. Hence, any particular manila folder contained all responses by principals about a particular factor that reduced principals' experiences of stress. The factors which emerged from the data were explored further with the purpose of identifying underlying patterns and themes, and developing as complete, holistic, and contextual portrayals as possible of factors that reduce principals' experiences of stress.

Qualitative data: analysis of factors that contribute to stress experience. The third major question of the semi-structured interview (shown in Appendix B) sought principals' descriptions of aspects of their schools, their administrative styles, or any other factors that contribute to their experiences of overall work-related stress. An identical method of content analysis to that used for identifying factors reducing stress was employed for factors contributing to overall work-related stress of principals.

A more detailed description of the content analysis system has been provided in Appendix E of the study.

Presentation of the Findings

The findings of the study are presented in the next three chapters. Each chapter presents the findings related to one of the three objectives of the study. The presentation of the findings of the qualitative data analysis was guided by the following statement by Bogdan and Biklen (1982:177):

> A good qualitative paper is well-documented with description taken from the data to illustrate and substantiate the assertions made. There are no formal conventions used to establish truth in a qualitative research paper. Your task is to convince the reader of the plausibility of your presentation. Quoting your subjects and presenting short sections from the fieldnotes and other data helps convince the reader; it also helps your reader get closer to the people you have studied.

The data and findings related to work-related sources of stress are presented in Chapter 4. The data and findings related to coping behaviors are presented in Chapter 5. The findings of descriptive and exploratory analyses of work-related situations, coping behaviors used by principals, and other factors associated with principals' experiences of overall work-related stress are presented in Chapter 6.

RESEARCH INSTRUMENTATION

The Interview

A semi-structured interview schedule was used to provide principals with the opportunity:

1. to identify and describe aspects, situations, events, or role expectations of the principalship that they had experienced as very or extremely stressful and to give reasons why these were so stressful.

2. to identify and describe aspects of their schools, their administrative styles, or any other factors that reduce their experiences of overall work-related stress; and

3. to identify and describe aspects of their schools, their administrative styles, or any other factors that contribute to their experiences of overall work-related stress.

A flexible and emergent design for interviews was employed. Guba (1980:10) maintains that "Some elements of design can always be specified in advance, and the wise inquirer will specify all such elements as he can while retaining a flexible posture that permits changes and emendations as the situation may dictate." Hence, only three key questions, which were asked of all interviewees, were included on the semi-structured interview schedule shown in Appendix B. However, most principals who, in response to the last two major questions of the semi-structured interview, did not *spontaneously* identify any Edmonton Public School System factors as having a bearing upon their experiences of stress were asked to respond to the following three additional questions:

1. *What effect, if any, does school-based budgeting have upon your experience of work-related stress?*

2. *What effect, if any, does the one-line authority structure have upon your experience of work-related stress?*

3. *What effect, if any, does the right to be involved in the selection of personnel for appointment or transfer to your school have upon your experience of work-related stress?*

Other questions were asked during the semi-structured interviews; these were developmental questions in the sense that they were used to prompt, probe, seek further explanation, and encourage more indepth descriptions.

The Questionnaire

The questionnaire included five sections each of which served several purposes.

Part A: School data.

This section contained questions pertaining to structural characteristics of the school, professional experience of the principal, and school contextual characteristics. The following variables were measured:

Structural : type of school, size of school;

Professional: years of experience as a principal in present school, years of experience in total as a principal;

Contextual : level of staff cohesiveness in the school, level of support from staff for the principal.

Part B: Overall work-related stress. Only one item was included in this section. The item was a measure of principals' perceptions of the overall stress associated with the work-role of principal. Responses to the question: "In general, how stressful do you find the role of principal?" were sought on a five-point scale labelled: "not stressful," "mildly stressful," "moderately stressful," "very stressful," and "extremely stressful."

Part C: Sources of stress. In this section of the questionnaire work-related potential sources of stress were listed. Principals were asked to rate each item in response to the question: "How stressful has each situation been for you?" on a five-point scale labelled: "not stressful," "mildly stressful," "moderately stressful," "very stressful," and "extremely stressful." Principals were also asked to assess each work-related situation in response to the question: "How often has this situation occurred for you?" on a six-point scale labelled: "never," "rarely," "about 1-3 times per year," "about 1-3 times per month," "about 1-3 times per week," and "about 1-3 times per day."

Part D: Coping behaviors. In this section of the questionnaire coping behaviors were listed. Principals were asked how frequently they had used each coping behavior to deal with work-related stress. Responses were sought on a frequency scale identical to that provided in Section C of the questionnaire. For each coping behavior that principals had actually employed to deal with stressful situations, principals were also asked to rate how effective they found the behavior in helping them cope with work-related stress. Responses were sought on a five-point effectiveness scale labelled: "not effective," "slightly effective," "moderately effective," "very effective," and "highly effective."

Part E: The Jenkins Activity Survey (Form C). This is a self-report multiple choice questionnaire of 52 items designed to measure the Type A behavior pattern found to be associated with the risk of coronary heart disease. The instrument provides individual scores and percentile ranks for the multifactorial clinical construct of the Type A behavior pattern and for three factorially independent components of this broader construct which have been labelled: "Factor S (Speed and Impatience)," "Factor J (Job Involvement)," and "Factor H (Hard-Driving and Competitive)."

Instrument Development

The questionnaire. At the time of this research a validated and reliable questionnaire for the identification of sources of stress and coping behaviors of principals in an Alberta context was not available.

The researcher had previously developed and used a questionnaire to report sources of stress for principals in an Australian context (Jankovic, 1981). The Cronbach split-half reliability coefficient of this instrument was 0.95. Following an evaluation of items by three practising Alberta principals, items from the Jankovic (1981) instrument that were deemed invalid in the Alberta context were rejected by the researcher. The three principals suggested additional potential sources of stress items which were more specific to the Alberta context. To the remaining items were added potential sources of stress from the project ASK instrument -- Tasks of the Alberta

Principal (Caldwell et al., 1980) -- and items from two studies conducted in the United States, one by Koff et al. (1981) and the other by Warner (1980). Hence, an initial list of 68 potential sources of stress items was produced for further pilot testing. These items were deemed to be illustrative of the conceptual framework of potential organizational sources of stress which was reviewed in Chapter 2. More specifically, these items related to the boundary-spanning role of the principal, interpersonal relationships and conflicts, role overload, role conflict and ambiguity, decision-making responsibility, and organizational constraints.

Few studies of coping behavior have been reported in the literature. The researcher obtained three recent and prominent studies of coping (Dewe et al., 1979; Kyriacou, 1980c; Crowson and Porter-Gehrie, 1980), and from these identified 28 direct-action and palliative coping behaviors that were reported in either two or all three of the studies.

During the second phase of questionnaire development, the researcher asked one superintendent, four principals, a senior member of the Employee Relations Division in the Edmonton Public School Board Administration, a senior member of the Professional Development Department of the Alberta Teachers' Association, and the researcher's dissertation supervisor to examine critically each of the 68 potential sources of stress and the 28 coping behavior items for validity in the Alberta context, clarity, wording, specificity, appropriateness, and duplication. Each of the persons was invited to provide an overall rating for each item and to suggest additional items. On the basis of recommendations and suggested rewording of items, the researcher prepared the second draft of the questionnaire.

During the third phase of questionnaire development two associate superintendents of the Edmonton Public School System and four professors of the Faculty of Education at the University of Alberta were asked to assess items and scales critically for clarity, specificity, and content validity for principals in the Edmonton Public School System. In addition, 10 practising principals in the Edmonton Public School System were asked to complete the second draft of the questionnaire and, subsequently, to comment critically about the content of items, the appropriateness of the rating scales, and the time that it took to complete the questionnaire. Recommendations for modifications, additions, and deletions were accepted by the researcher, and the third version of the questionnaire was prepared.

The final version of the questionnaire was prepared by the researcher after discussion with some members of the researcher's dissertation committee and with the computer analyst in the Department of Educational Administration at the University of Alberta. The final version of the questionnaire contained 43 potential sources of stress items and 24 coping behavior items, all considered valid for principals in the Edmonton Public School System.

The interview. A pilot trial of the interview schedule was conducted by the researcher with three principals. Two of these interviews were tape recorded; transcripts were made and content analyses performed. Another graduate student was asked to content analyze the interview transcripts. The average inter-rater reliability coefficient between the researcher and the graduate student for the two interview transcripts was 0.91.

Following these trial interviews, the researcher modified the wording of the three key questions. Furthermore, the researcher learned to be more flexible in questioning and to interrupt less often during semi-structured interviews.

Validity and Reliability

Content validity of the sources of stress and coping behavior items. To ensure that items in Sections A, C, and D of the questionnaire were valid for principals in the Edmonton Public School District context, the researcher conducted an intensive instrument development program, described previously, in which practising principals, superintendents, university professors, and other experts were asked to assess critically the content validity of items.

Reliability of the sources of stress and coping behavior instruments. One test of reliability was employed: an internal consistency method known as the odd-even split-half coefficient method. Popham (1975:118) states that the split-half technique involves:

> . . . dividing a test into two equal halves, ordinarily by treating the odd then the even items as though they constituted separate tests. The total test is administered to a group of individuals, then their two subscores . . . are correlated. The resulting correlation coefficient is considered an estimate of the degree to which the two halves of the test are performing their functions consistently.

The Guttman split-half coefficient was computed separately for the two scales on the sources of stress instrument -- "frequency" and "stressfulness" -- and the two scales on the coping behaviors instrument -- "frequency" and "effectiveness." The Guttman coefficient was 0.85

for the "frequency" scale of the sources of stress instrument, and 0.96 for the "stressfulness" scale of the sources of stress instrument. The Guttman coefficient was 0.71 for the "frequency" scale of the coping behaviors instrument, and 0.82 for the "effectiveness" scale of the coping behaviors instrument. Sections C and D of the questionnaire were thus accepted as adequately reliable instruments for the purposes of the study.

Construct validity of the general measure of stress. Kyriacou (1980a:3) stated that measures of occupational stress which have been used widely fall into three groups: (1) measures based on chronic symptoms, such as peptic ulcers or coronary heart disease; (2) observational measures, such as heart rate, catecholamine excretion, or muscle tension; and (3) measures based on self-reports. Kyriacou (1980a:4) asserts that ". . . this third group of measures, in particular, simple single item survey type instruments used in questionnaires, has been the most successful." The main advantage, according to Kyriacou (1980a:4), is that "The relationship between the measure and what it purports to measure is clear." Furthermore, it is easy to use; it is not a measure of stress at a particular time but is a more general measure; it yields a single score which may be related to other variables; and it can be used as an index of the prevalence of stress. The transactional conceptualization of stress places emphasis on the individual's subjective experience of an affective state and as such a self-report measure was employed in this study.

Kyriacou and Sutcliffe (1977b, 1978b, 1979a, 1979b) have conducted four studies of teacher stress and in each study teachers were asked to respond to the question: "In general, how stressful do you find being a teacher?" on a five-point scale from "not at all stressful" to "extremely stressful." Kyriacou (1980d:115) concludes:

> This measure of teacher stress (self-reported teacher stress) appears to have high face validity and on the basis of significant correlations with reported frequency of stress symptoms (Kyriacou and Sutcliffe, 1978b) good concurrent validity.

Jankovic (1981) employed a similar measure of self-reported principal stress. Jankovic (1981:142) reported that "All 50 potential sources of stress correlated positively and significantly with the self-report measure of principal stress."

Measurement of the Type A behavior pattern. Classification of Type A and Type B individuals has been accomplished by means of a standard interview administered and evaluated by specially trained interviewers (Rosenman et al., 1975). Subjects have been asked questions dealing with the intensity of their ambitions, time urgency, competitiveness, and hostile feelings. Friedman and Rosenman (1974:80) state that the questions themselves are far less important than the manner of response to them. The major advantage of the interview technique, according to Friedman and Rosenman (1974), is that it allows the interviewer to probe and challenge subjects to disclose reasons behind their answers, and to evoke voice and psychomotor mannerisms said to characterize the Type A behavior pattern. Glass (1977a:179) states that while the manner and tone of individuals' responses have been given somewhat more weight than the content of their answers, the content has been an important determinant of the classification of individuals' behavior patterns. The interview procedure has been shown to have ". . . acceptable levels of interjudge agreement (76-84 percent in various studies) and adequate stability over time (80 percent of cases constant over a mean interval of 18 months)" (Jenkins et al., 1967:372).

The interview technique for classifying Type A and B individuals has some disadvantages. The standard interview takes about 20 minutes per subject. The training of interviewers takes from one week to one month. According to Jenkins et al. (1967:372), "All individuals are not equally facile in learning to apprehend and interpret the particular features of behavior upon which determination of the behavior pattern depends." Jenkins et al. (1967:372) conclude that:

> Although it has proven reliable and valid, it is too slow, uneconomical and dependent on interviewer's skills to permit its use in most large-scale studies.

An alternative approach to Type A and Type B classification is based on a self-administered questionnaire called the Jenkins Activity Survey (JAS). Zyzanski and Jenkins (1970:781) report that a simple scoring method was found to identify validly the behavior pattern of 72 percent of men, the clinical interview being the criterion. Jenkins et al. (1967:372) report that evidence suggests that JAS responses are not significantly influenced by age differences in men in the two age decades 40 to 60 years.

As a consequence of the development of the JAS, the question arose whether the multifaceted Type A behavior pattern was a single syndrome or loose aggregation of traits or subsyndromes (Zyzanski and Jenkins, 1970:781). Factor analyses of individually scored items of the JAS were performed to answer this question. Three factors were revealed by orthogonal rotations of the principal axes. Zyzanski and Jenkins (1970:794) concluded that the coronary-prone behavior pattern is actually composed of at least three major, conceptually independent, behavioral syndromes: "Hard-Driving and Competitive," "Job Involvement," and "Speed and Impatience." Zyzanski and Jenkins (1970:791) add that it is not known whether motor mannerisms, explosiveness of speech, and other characteristics which are observable to trained observers comprise a fourth dimension or whether these merge with the factor derived from the JAS questionnaire and labelled "Speed and Impatience."

The conceptually and statistically independent factors were described by Jenkins et al. (1971b:602) as:

> Factor S (Speed and Impatience). This factor deals with the time urgency revealed in the style of behavior of the Type A person. Those scoring high on this factor eat very rapidly, become impatient with the conversation of others, hurry other people along, and tend to have stronger tempers.
>
> Factor J (Job Involvement). This factor expresses degree of dedication to occupational activity. Persons scoring high on this factor report having a high pressure job which challenges them. They work overtime and confront important deadlines. They prefer a promotion to a raise in pay, but usually have received both in the last few years.
>
> Factor H (Hard-Driving and Competitive). This factor involves perceptions of oneself as being hard-driving, conscientious, responsible, serious, competitive and putting forth more effort than other people. This coherent series of traits suggests highly socialized but intense drives.

Validity of the Jenkins Activity Survey. The validity of the JAS has been established in several ways. Initial steps to validate the JAS were in terms of agreement of JAS scores with interview judgements. Jenkins et al. (1971a:196) reported the results of a cross-validation of the JAS scores with interview ratings of 419 Western Collaborative Study Group subjects, shown in Table 3.2. Jenkins et al. (1971a:196) report that:

Table 3.2

Correspondence Between Type A Ratings on the JAS and Type A Ratings on the Structured Interview
Jenkins et al. (1971a:196)

Type A Score on JAS[a]	WCGS Cross-Validation Sample (N = 419)	
	Sample Size	Percent Rated in Agreement[b]
+10.0 and over	82	91
+5.0 to +9.9	61	82
0.0 to +4.9	55	56
-4.9 to -0.1	76	43
-9.9 to -5.0	60	68
-10.0 and less	85	88
Overall percentage in agreement		73

[a] The 1965 edition of the JAS was used with the WCGS. Items in the Type A scale and Type B scale scores are identical for Form C.

[b] Rated Type A on both measures or rated Type B on both measures.

> It can be seen that persons with extreme scores can be more accurately predicted than can persons with borderline scores. Individuals who score a standard deviation above (in the Type A direction) or below the mean (in the Type B direction) are considerably more likely to be identically typed via the interview procedure -- 91 and 88 percent respectively -- whereas individuals who score within one-half of a deviation from the standardized mean are less likely to be in agreement -- 56 and 43 percent respectively -- with their corresponding interview criterion.

Jenkins et al. (1971a:199) comment that the percentage agreements should probably be considered lower limits of reproducibility inasmuch as three years had elapsed between interviews and the JAS tests. The rate of agreement between two interviews, occurring 12-20 months apart, was 80 percent (Jenkins et al., 1971a:199). The interview rating was used as a criterion of validity because it was the procedure for rating the Type A pattern which has been shown to be associated with coronary heart disease.

Reliability of the Jenkins Activity Survey. Two kinds of reliability estimates have been reported for the JAS scales: internal consistency and test-retest.

Table 3.3 presents internal consistency reliability estimates that have been computed for the JAS.

Table 3.4 presents test-retest reliability estimates for the JAS. The test-retest coefficients between 1965 and 1969 editions of the JAS administered at a four-year interval approximate alternate forms of test-retest reliability because these two Type A scales contain only six items in common. When the same JAS edition was readministered after a four to six month interval, the retest coefficients varied from 0.65 to 0.82 (Jenkins et al., 1979:24).

Table 3.3

Internal Consistency Reliability Coefficients
for the JAS
Jenkins et al. (1979:23)

JAS	N	Type A	Factor S	Factor J	Factor H
1969[a]	630	.85	.83	.80	.73
1969[b]	630	.83	--	--	--

[a] Reliability estimate based on squared multiple correlation item reliabilities on a 25 percent random sample of men participating in the Western Collaborative Group Study.

[b] Reliability estimate based on Kendall's tau b item reliabilities on a 25 percent random sample of men participating in the Western Collaborative Group Study. Items in the scales (A, S, J, and H) and scale scores are identical for the 1969 and for Form C.

Table 3.4

Test-Retest Reliability Coefficients
for the JAS
Jenkins et al. (1979:24)

				Reliability Coefficient			
Population	N	JAS Form	Interval	Type A	Factor S	Factor J	Factor H
WCGS	2,395	1965,1969	4 years	.64	.65	.68	.57
WCGS	2,332	1966,1969	3 years	.74	.67	.69	.56
Minnesota[a]	92	1966,1966	4-6 months	.76	.65	.82	.68

[a] Adult male volunteers who participated in a physical fitness program in Minnesota.

SUMMARY

Descriptions of the design, methodology, and instrumentation of the study were provided in three major sections of the chapter. In addition, instrument development procedures were outlined, and validity and reliability data for the research instrumentation were provided.

In the first major section of the chapter, the purpose and nature of the study were described; the specific research variables and relationships were delineated. The issues which were considered in the selection of the respondent group were outlined and, in addition, the composition of the respondent group of principals was described.

The emphasis of the second major section of the chapter was to describe the methods used for the collection and analysis of the data. Both questionnaires and semi-structured interviews were used to obtain data related to the three major objectives of the study. These quantitative and qualitative data were collected to gain as complete, holistic, and contextual descriptions as possible of sources of stress for principals, coping behaviors used by principals, and factors associated with principals' experiences of overall work-related stress. Descriptive and exploratory statistical techniques were used for the analysis of quantitative data, and a content analysis system was employed for the processing of qualitative data.

In the final major section of the chapter, the instruments used in the study were described, and procedures employed in the development and validation of the instrumentation were outlined. The questionnaire was developed in four stages. Practising principals and associate superintendents in the Edmonton Public School System, university professors, and other experts critically reviewed items of the questionnaire during each phase of instrument development to increase the content validity of the instrument. Validity and reliability data for the questionnaire and the Jenkins Activity Survey -- for measurement of Type A behavior -- were provided.

CHAPTER 4

WORK-RELATED SOURCES OF STRESS

Descriptive and exploratory analyses of data gathered by questionnaires and interviews on work-related sources of stress for principals are presented in this chapter. The chapter is divided into four major sections each of which presents data, findings, and discussions in relation to the sub-problems of Problem Statement 1, which read:

> *To what extent have principals in the study group experienced stress associated with work-related situations?*

The frequency with which specified work-related situations occur in the principalship and principals' perceptions of stress associated with these situations are reported in the first section of the chapter. An exploratory factor analysis of work-related situations is presented in section two. Relationships between selected individual characteristics of principals and principals' perceptions of stress as measured by each work-related factor are explored in section three. In the final section of the chapter, indepth descriptions and analyses are presented of work-related situations identified and described as very or extremely stressful by principals during semi-structured interviews.

SOURCES OF STRESS

> *1.1. How frequently has each specified work-related situation occurred, and how stressful has each work-related situation been for principals when it has occurred?*

The term "specified work-related situation" refers to each of the 43 potential sources of stress items that were provided in Section C of the questionnaire. Principals were asked to report the frequency of occurrence of each work-related situation. The response categories of the "frequency of occurrence" scale, with assigned rating scores, were labelled: "never" (score 0), "rarely" (score 1), "about 1-3 times per year" (score 2), "about 1-3 times per month" (score 3), "about 1-3 times per week" (score 4), and "about 1-3 times per day" (score 5). In addition, principals were asked to report the degree of stressfulness of each work-related situation. The response categories of the "stress" scale, with rating scores, were labelled: "not stressful" (score 0), "mildly stressful" (score 1), "moderately stressful" (score 2), "very stressful" (score 3), and "extremely stressful" (score 4). Instructions were given to principals to leave a blank response on the "stress" scale for those work-related situations which they had never experienced.

Mean scores were computed for the "frequency of occurrence" and "stress" scales of each work-related situation by using the assigned category rating scores. These provided estimates of the relative frequency of occurrence and degree of stress of each work-related situation.

The percentage frequency distributions of responses by principals and mean scores for "frequency of occurrence" and "stress" of each work-related situation are presented in Table 4.1. It should be noted that the responses on the "stress" scale of any particular item were only from principals who had experienced the work-related situation at least once. For example, item 1 -- "Recommending the

Table 4.1

Percentage Frequency Distribution of Responses and Mean Scores for

Frequency of Occurrence and Stress of Work-Related Situations

	Frequency of Occurrence Percentage of Responses							Stress Percentage of Responses					
	0	1	2	3	4	5		0	1	2	3	4	
Work-Related Situations	Never	Rarely	About 1-3 times/year	About 1-3 times/month	About 1-3 times/week	About 1-3 times/day	Frequency Means	Not Stressful	Mildly Stressful	Moderately Stressful	Very Stressful	Extremely Stressful	Stress Means
1. Recommending the dismissal of a tenured teacher.	54	44	2	0	0	0	0.48	8	8	20	48	16	2.56
2. Recommending the non-renewal of a temporary contract.	42	48	10	0	0	0	0.68	10	16	29	32	13	2.23
3. Recommending the transfer of a teacher.	24	58	18	0	0	0	0.94	8	18	37	29	8	2.11
4. Resolving parent-teacher conflicts and misunderstandings.	0	4	54	36	6	0	2.44	6	27	50	17	0	1.77
5. Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	0	26	56	18	0	0	1.92	10	38	36	10	6	1.64
6. Resolving interpersonal conflicts among staff.	2	32	54	12	0	0	1.76	6	33	33	15	13	1.94
7. Working with teachers who view administrators with suspicion and/or hostility.	10	51	33	6	0	0	1.35	17	34	32	15	2	1.51
8. Conducting staff meetings.	0	0	4	94	2	0	2.98	38	40	20	2	0	0.86
9. Dealing with a teacher whom you consider deficient in teaching skills.	0	40	56	4	0	0	1.64	14	32	38	16	0	1.56
10. Having to tolerate a teacher whose attitudes you consider unprofessional.	16	56	24	2	2	0	1.18	13	25	32	25	5	1.82
11. Presenting a teacher with a formal report on his/her unsatisfactory performance.	32	56	12	0	0	0	0.80	14	11	26	40	9	2.17
12. Maintaining rapport and cooperation with all staff.	0	4	12	10	18	56	4.10	50	24	24	2	0	0.78
13. Developing school policy that all staff accept and actively support.	0	2	63	33	2	0	2.35	22	39	35	4	0	1.20
14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	4	42	42	12	0	0	1.62	11	50	31	6	2	1.40
15. Suspending a student from school.	20	22	42	16	0	0	1.54	20	29	29	17	5	1.59

Table 4.1 (continued)

	Frequency of Occurrence Percentage of Responses							Stress Percentage of Responses					
	0	1	2	3	4	5		0	1	2	3	4	
Work-Related Situations	Never	Rarely	About 1-3 times/year	About 1-3 times/month	About 1-3 times/week	About 1-3 times/day	Frequency Means	Not Stressful	Mildly Stressful	Moderately Stressful	Very Stressful	Extremely Stressful	Stress Means
16. Dealing with student vandalism of school property.	4	26	62	8	0	0	1.74	27	48	21	4	0	1.02
17. Informing parents of their child's unsatisfactory behavior.	0	2	20	76	2	0	2.78	26	32	40	2	0	1.18
18. Having to make the final decision that a particular student will have to repeat the year.	6	27	65	2	0	0	1.63	11	47	31	11	0	1.42
19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	0	0	0	12	42	46	4.34	36	42	16	6	0	0.92
20. Performing duties with interruptions (e.g. telephone, students, parents, etc.).	0	0	0	2	14	84	4.82	24	40	32	4	0	1.16
21. Having insufficient time to stop work and relax for lunch.	6	8	4	20	54	8	3.32	28	28	35	9	0	1.24
22. Being too rushed to complete tasks to your satisfaction.	4	10	16	44	16	10	2.88	2	27	42	25	4	2.02
23. Resolving the time demands of the principalship with the time demands of your family.	8	16	20	42	12	2	2.40	17	38	32	13	0	1.40
24. Contending with time pressures to complete the budget by the required date.	4	16	78	0	2	0	1.80	6	36	33	21	4	1.81
25. Projecting staffing needs.	0	4	86	10	0	0	2.06	22	44	28	6	0	1.18
26. Establishing consensus among staff about budget issues.	0	6	88	6	0	0	2.00	18	39	25	16	2	1.45
27. Making decisions about personnel, school equipment, and instructional materials subject to the constraints of the budget.	0	0	46	44	10	0	2.64	18	54	24	4	0	1.14
28. Having unclear role specifications from the Board and Central Office.	12	42	36	10	0	0	1.44	20	35	28	17	0	1.44
29. Having unclear guidelines as to your legal rights and authority as principal.	6	54	36	4	0	0	1.38	19	31	35	13	2	1.48
30. Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office, or the Board.	6	28	40	12	8	6	2.06	25	46	23	4	2	1.13
31. Being criticized by parents or teachers for some of your administrative decisions.	0	32	58	10	0	0	1.78	6	28	42	20	4	1.88

Table 4.1 (continued)

Work-Related Situations	Frequency of Occurrence Percentage of Responses 0 Never	1 Rarely	2 About 1-3 times/year	3 About 1-3 times/month	4 About 1-3 times/week	5 About 1-3 times/day	Frequency Means	Stress Percentage of Responses 0 Not Stressful	1 Mildly Stressful	2 Moderately Stressful	3 Very Stressful	4 Extremely Stressful	Stress Means
32. Resolving in your own mind the expectations of your staff for you as principal.	2	14	54	22	8	0	2.20	16	36	36	10	2	1.46
33. Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	2	18	66	14	0	0	1.92	6	40	40	10	4	1.67
34. Making decisions about issues over which there are no clear school district policy guidelines.	2	28	54	16	0	0	1.84	12	45	29	14	0	1.45
35. Overcoming Central Office "red tape."	0	22	34	38	6	0	2.28	20	52	16	12	0	1.20
36. Having insufficient control over the appointment of teachers to your school.	30	50	20	0	0	0	0.90	16	27	30	19	8	1.76
37. Allocating teaching assignments.	4	4	90	2	0	0	1.90	26	43	29	2	0	1.06
38. Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	0	32	44	22	0	2	1.96	8	33	45	8	6	1.71
39. Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	8	48	40	2	2	0	1.42	9	39	33	17	2	1.65
40. Experiencing an inadequate level of advice and support from your Associate Superintendent.	26	44	18	12	0	0	1.16	16	26	29	21	8	1.79
41. Experiencing interpersonal conflict with your Associate Superintendent.	71	18	4	6	0	0	0.45	31	21	16	16	16	1.63
42. Experiencing a poor working relationship with your assistant principal(s).	64	28	2	4	0	2	0.55	35	13	17	18	17	1.70
43. Promoting a positive school image in the community.	0	4	18	38	32	8	3.22	26	41	31	2	0	1.08

dismissal of a tenured teacher" -- had been experienced either "rarely" or "about 1-3 times per year" by a total of 46 percent of the respondents. The remaining 54 percent of respondents had never experienced this situation. Hence, the distribution of responses, shown in Table 4.1, to the "stress" of item 1 is the percentage frequency distribution of responses by only the 46 percent of principals who had experienced this situation. The 54 percent of principals who had never experienced this work-related situation were instructed to submit a blank response on the "stress" rating scale for this item. Therefore, the percentage frequency distribution of responses and mean score for "stress" of any particular item are estimates of the extent to which stress was perceived by only those principals who had actually experienced that work-related situation.

The spread of responses for "frequency of occurrence" of most work-related situations is less than the spread of responses for "stress." For example, principals were essentially in agreement that item 11 -- "Presenting a teacher with a formal report on his/her unsatisfactory performance" -- seldom occurred. More specifically, 32 percent reported that this situation had "never" occurred, 56 percent reported "rarely," and 12 percent reported "about 1-3 times per year." By contrast, principals who had experienced this situation varied considerably in their perceptions of the stress associated with having to present a formal report of unsatisfactory performance to a teacher. Responses ranged from 14 percent who reported the situation as "not stressful" to 9 percent who reported it as "extremely stressful."

The range in perceptions of stress associated with each work-related situation extended from "not stressful" to at least "very stressful." For 24 of the 43 specified work-related situations perceptions of stress ranged from "not stressful" to "extremely stressful."

Striking differences in the frequency of occurrence of some situations were reported by principals. In particular, responses to "frequency of occurrence" ranged from "never" to "about 1-3 times per day" for the following work-related situations: item 21 -- "Having insufficient time to stop work and relax for lunch," item 22 -- "Being too rushed to complete tasks to your satisfaction," item 23 -- "Resolving the time demands of the principalship with the time demands of your family," and item 30 -- "Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office, or the Board."

Thirty-five of the work-related situations have mean scores for "stress" which are between 1.00 and 2.00. A mean score of 1.00 corresponds to a group perception of "mildly stressful," and a mean score of 2.00 corresponds to a group perception of "moderately stressful." Therefore, principals reported *on average* most work-related situations as "mildly" to "moderately stressful." Nevertheless, it should be kept in mind that for each work-related situation *individual* responses ranged from "not stressful" to at least "very stressful."

Sources of Stress in Rank Order

1.2. What is the rank order of the specified work-related situations from the most stressful to least stressful?

Work-related situations which appeared in Section C of the questionnaire were arranged in rank order using the mean of the response category scores for "stress" of each item. Each work-related situation is presented in Table 4.2 in rank order of the degree of stress reported on average by those principals who had experienced the situation. Also provided with each work-related situation in Table 4.2 is the mean score for "frequency of occurrence." This measure is an estimate of the relative frequency of occurrence of each situation.

In view of the considerable variation, identified above, in responses by individuals to the degree of stress associated with any item, the listing of work-related situations in descending order of means for "stress" should be treated only as a guide to the relative importance of each event as a source of stress for principals. Furthermore, in assessing the contribution of any particular work-related situation to the stress of principals, it is important to consider the frequency with which that work-related situation has been reported to occur in the role of principal.

The four most stressful items describe situations in which principals have to deal with a teacher whose performance is unsatisfactory. The most stressful situation is: "Recommending the dismissal of a tenured teacher." The other three most stressful situations are: "Recommending the non-renewal of a temporary contract," "Presenting a teacher with a formal report on his/her unsatisfactory performance," and "Recommending the transfer of a teacher." Even though on average these situations create considerable stress for principals, each situation has a relatively low mean score for "frequency of occurrence." Clearly, these are important sources of stress for principals but, for most principals, these situations seldom occur. For example, a further inspection of Table 4.1 reveals that 98 percent of principals had "never" or "rarely" recommended the dismissal of a

Table 4.2

Rank Order of Work-Related Situations
According to Stress Mean Scores

Rank	Work-Related Situations	Frequency Mean	Stress Mean
1	Recommending the dismissal of a tenured teacher.	0.48	2.56
2	Recommending the non-renewal of a temporary contract.	0.68	2.23
3	Presenting a teacher with a formal report on his/her unsatisfactory performance.	0.80	2.17
4	Recommending the transfer of a teacher.	0.94	2.11
5	Being too rushed to complete tasks to your satisfaction.	2.88	2.02
6	Resolving interpersonal conflicts among staff.	1.76	1.94
7	Being criticized by parents or teachers for some of your administrative decisions.	1.78	1.88
8	Having to tolerate a teacher whose attitudes you consider unprofessional.	1.18	1.82
9	Contending with time pressures to complete the budget by the required date.	1.80	1.81
10	Experiencing an inadequate level of advice and support from your Associate Superintendent.	1.16	1.79
11	Resolving parent-teacher conflicts and misunderstandings.	2.44	1.77
12	Having insufficient control over the appointment of teachers to your school.	0.90	1.76
13	Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	1.96	1.71
14	Experiencing a poor working relationship with your assistant principal(s).	0.55	1.70
15	Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	1.92	1.67
16	Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	1.42	1.65
17	Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	1.92	1.64
18	Experiencing interpersonal conflict with your Associate Superintendent.	0.45	1.63
19	Suspending a student from school.	1.54	1.59
20	Dealing with a teacher whom you consider deficient in teaching skills.	1.64	1.56
21	Working with teachers who view administrators with suspicion and/or hostility.	1.35	1.51
22	Having unclear guidelines as to your legal rights and authority as principal.	1.38	1.48
23	Resolving in your own mind the expectations of your staff for you as principal.	2.20	1.46
24	Making decisions about issues over which there are no clear school district policy guidelines.	1.84	1.45
25	Establishing consensus among staff about budget issues.	2.00	1.45
26	Having unclear role specifications from the Board and Central Office.	1.44	1.44
27	Having to make the final decision that a particular student will have to repeat the year.	1.63	1.42

Table 4.2 (continued)

Rank	Work-Related Situations	Frequency Mean	Stress Mean
28	Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	1.62	1.40
29	Resolving the time demands of the principalship with the time demands of your family.	2.40	1.40
30	Having insufficient time to stop work and relax for lunch.	3.32	1.24
31	Overcoming Central Office "red tape."	2.28	1.20
32	Developing school policy that all staff accept and actively support.	2.35	1.20
33	Informing parents of their child's unsatisfactory behavior.	2.78	1.18
34	Projecting staffing needs.	2.06	1.18
35	Performing duties with interruptions (e.g. telephone, students, parents, etc.).	4.82	1.16
36	Making decisions about personnel, school equipment, and instructional materials subject to the constraints of the budget.	2.64	1.14
37	Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office, or the Board.	2.06	1.13
38	Promoting a positive school image in the community.	3.22	1.08
39	Allocating teaching assignments.	1.90	1.06
40	Dealing with student vandalism of school property.	1.74	1.02
41	Completing reports, questionnaires, forms, letter writing, and other paperwork.	4.34	0.92
42	Conducting staff meetings.	2.98	0.86
43	Maintaining rapport and cooperation with all staff.	4.10	0.78

tenured teacher, 90 percent of principals had "never" or "rarely" recommended the non-renewal of a temporary contract, 82 percent of principals had "never" or "rarely" recommended the transfer of a teacher, and 88 percent of principals had "never" or "rarely" presented a teacher with a formal report on his/her unsatisfactory performance.

The ten least stressful work-related situations involve tasks and functions of the principalship that can be characterized as: (1) relatively routine, (2) expected or taken for granted as part of the normal role of a principal, and (3) relatively unambiguous. Examples of routine tasks and functions include: "Completing reports, questionnaires, forms, letter writing, and other paperwork," and "Performing duties with interruptions (e.g. telephone, students, parents, etc.)." These items have relatively low mean scores for "stress" but relatively high mean scores for "frequency of occurrence." Examples of expected or anticipated requirements of the principalship include: "Maintaining rapport and cooperation with all staff," "Conducting staff meetings," "Promoting a positive school image in the community," and "Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office, or the Board." Some of the situations that were reported as low in stress describe problem situations that are relatively well defined and which require a standard set of decisions and actions by the principal. For instance, in having to deal with student vandalism of school property, the principal is normally guided by a set of standard procedures. Similarly, the role of the principal in respect to the allocation of teaching assignments is well defined and decisions are relatively easy and clear cut.

Frequency of Occurrence and Stress

> *1.3. What relationships exist between the frequency of occurrence of the specified work-related situations and principals' perceptions of the stress associated with these situations?*

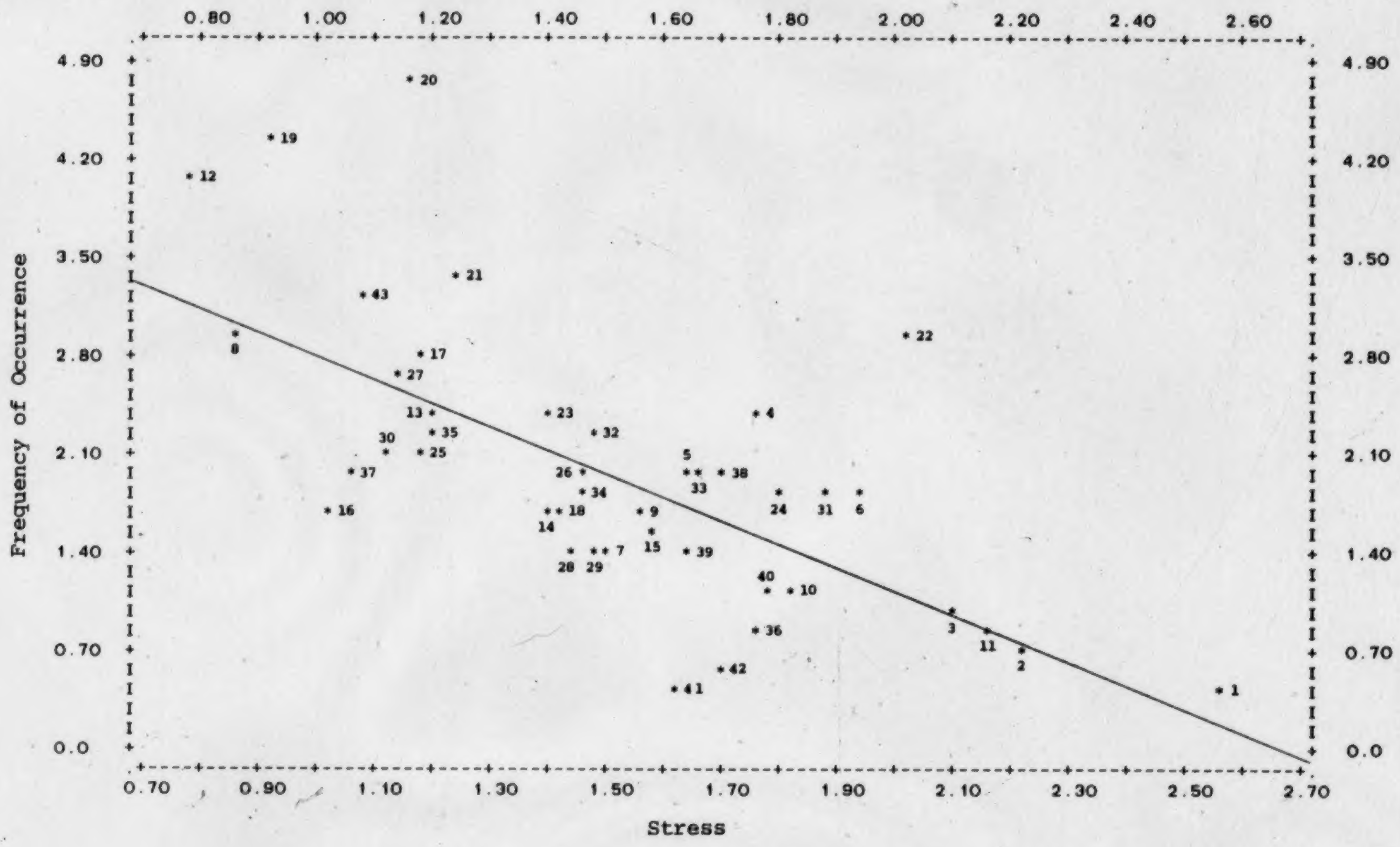
The Pearson correlation coefficient was computed between the set of mean scores for "stress" of each work-related situation and the set of mean scores for "frequency of occurrence" of corresponding work-related situations. The Pearson correlation coefficient ($r = -0.678$) was significant at the level $p < 0.0001$. This finding provides further support to the general finding of the previous section. Namely, that the more stressful work-related situations tend to occur less frequently in the role of principal and, conversely, the less stressful work-related situations tend to be more routine or occur more frequently in the principalship.

Figure 4.1 is a scattergram of the mean scores for "frequency of occurrence" of work-related situations (plotted on the vertical axis) versus the mean scores for "stress" associated with corresponding work-related situations (plotted on the horizontal axis). The regression line is also shown on the scattergram. It intersects the vertical axis at a mean "frequency of occurrence" score of 3.32 and the horizontal axis at a mean "stress" score of 2.74.

The scattergram is presented because it facilitates easy recognition of work-related situations that deviate considerably from the regression line. Items 12, 19, 20, 22, 41, and 42 deviate more from the regression line than the other items. Items 12, 19, and 20 have high mean scores for "frequency of occurrence" -- 4.1, 4.34, and 4.82 respectively -- but comparatively low scores for "stress" -- 0.78, 0.92, and 1.16 respectively --; hence, these work-related situations would be

Figure 4.1

Scattergram of Mean Scores for Frequency of Occurrence versus Mean Scores for Stress of Each Work-Related Situation



expected to contribute comparatively little to the total stress experiences of principals. Items 41 and 42 have mean scores for "stress" -- 1.63 and 1.70 respectively -- which could be interpreted as representing mild to moderate stress on average for principals. However, the mean scores for "frequency of occurrence" of these two items -- 0.45 and 0.55 respectively -- are very low. Hence, these work-related situations would also be expected to contribute comparatively little to the total stress experiences of principals.

The further that the plot of the mean scores of an item on the scattergram deviates from the regression line towards the upper-right sector of the graph, the higher its corresponding mean scores for "stress" and "frequency of occurrence." Only item 22 -- "Being too rushed to complete tasks to your satisfaction" -- should be of some concern because it occurs on average for principals "about 1-3 times per month" and it has a mean score for "stress" -- 2.02 -- which corresponds to a "moderate" experience of stress on average by principals. There were no work-related situations identified which occur on average for principals "about 1-3 times per week" and which were rated on average as being "very stressful."

UNDERLYING DIMENSIONS IN THE SOURCES OF STRESS

> *1.4. What descriptive factors can be extracted from a factor analysis of principals' perceptions of stress associated with each specified work-related situation?*

Principals' responses on the "stress" scale for each of the 43 work-related situations were factor analyzed using varimax rotation. The purpose of this analysis was to explore the data for underlying patterns of relationships so that the data could be described by a smaller set of factors. The first three factors (eigenvalues 15.58, 3.91, and 2.48 respectively) were selected for varimax rotation.[1] These three factors accounted for 51.1 percent of the variance. Factors 1, 2, and 3 accounted for 36.2 percent, 9.1 percent, and 5.8 percent respectively of the variance.

Items were considered to contribute to the meaning of a factor if they satisfied the following criteria:

1. Item loadings on a factor should be greater than or equal to .40.
2. Any item should load decisively on one factor only. Hence, if an item loaded above .40 on more than one factor it was not used for the purposes of factor interpretation.
3. Items included in a factor should contribute logically to the meaning of the factor.

Each work-related situation with its respective loadings on the three factors is presented in Table 4.3. Factor loadings greater than .40 are also identified in the Table. Item 42 -- "Experiencing a poor working relationship with your assistant principal" -- did not load above .40 on any of the three factors. Six work-related situations -- items 24, 25, 27, 34, 35, and 37 -- loaded above .40 on Factor 1 and Factor 2, and two work-related situations -- items 6 and 7 -- loaded above .40 on Factor 2 and Factor 3. These items were not used for

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[1] The criterion used for the selection of factors for rotation was the "Scree" or "Discontinuity test" (Harman, 1976). This method is based on the belief that once the last important factor has been extracted the eigenvalues will show a discontinuity.

Table 4.3

Varimax Factor Solution for 43 Work-Related Situations Using Three Factors

Work-Related Situations	Factors and Factor Loadings 1 Role Overload, Conflict and Ambiguity	2 Establishing Consensus and Gaining Support	3 Interacting with Personnel
19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	.729	.323	-.003
17. Informing parents of their child's unsatisfactory behavior.	.710	.377	.300
21. Having insufficient time to stop work and relax for lunch.	.672	.175	.089
18. Having to make the final decision that a particular student will have to repeat the year.	.667	.390	.017
15. Suspending a student from school.	.651	.082	.253
16. Dealing with student vandalism of school property.	.632	.334	.373
29. Having unclear guidelines as to your legal rights and authority as principal.	.580	.198	.354
23. Resolving the time demands of the principalship with the time demands of your family.	.556	.346	.141
20. Performing duties with interruptions (e.g. telephone, students, parents, etc.).	.552	.262	.179
4. Resolving parent-teacher conflicts and misunderstandings.	.481	.152	.151
22. Being too rushed to complete tasks to your satisfaction.	.468	.304	.270
14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	.447	.225	.327
33. Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	.432	.162	.383
28. Having unclear role specifications from the Board and Central Office.	.410	.362	.381
13. Developing school policy that all staff accept and actively support.	.157	.770	.059
43. Promoting a positive school image in the community.	.342	.744	-.049
32. Resolving in your own mind the expectations of your staff for you as principal.	.375	.729	.015
26. Establishing consensus among staff about budget issues.	.249	.656	.218

Table 4.3 (continued)

Work-Related Situations	Factors and Factor Loadings 1 Role Overload, Conflict and Ambiguity	 2 Establishing Consensus and Gaining Support	 3 Interacting with Personnel
12. Maintaining rapport and cooperation with all staff.	.196	.641	.068
31. Being criticized by parents or teachers for some of your administrative decisions.	.137	.634	.158
9. Dealing with a teacher whom you consider deficient in teaching skills.	.285	.563	.253
30. Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office or the Board.	.088	.560	.363
8. Conducting staff meetings.	.125	.484	.074
11. Presenting a teacher with a formal report on his/ her unsatisfactory performance.	.075	.037	.811
2. Recommending the non-renewal of a temporary contract.	-.044	.066	.797
10. Having to tolerate a teacher whose attitudes you consider unprofessional.	.112	.283	.671
40. Experiencing an inadequate level of advice and support from your Associate Superintendent.	.382	-.129	.656
1. Recommending the dismissal of a tenured teacher.	-.345	.016	.510
3. Recommending the transfer of a teacher.	.277	.118	.492
5. Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	.284	.185	.473
39. Delegating an area of responsibility to a staff member and, subsequently having to bear the consequences of that person's poor performance.	.346	.384	.457
41. Experiencing interpersonal conflict with your Associate Superintendent.	.286	.017	.437
36. Having insufficient control over the appointment of teachers to your school.	.294	.137	.436
38. Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	.353	.242	.434

Table 4.3 (continued)

Work-Related Situations	Factors and Factor Loadings 1 Role Overload, Conflict and Ambiguity	 2 Establishing Consensus and Gaining Support	 3 Interacting with Personnel
27. Making decisions about personnel, school equipment, and instructional materials subject to the constraints of the budget.	$\boxed{.568}$	$\boxed{.446}$	.069
34. Making decisions about issues over which there are no clear school district policy guidelines.	$\boxed{.400}$	$\boxed{.465}$	.178
35. Overcoming Central Office "red tape."	$\boxed{.518}$	$\boxed{.433}$	.120
24. Contending with time pressures to complete the budget by the required date.	$\boxed{.466}$	$\boxed{.547}$	.203
25. Projecting staffing needs.	$\boxed{.502}$	$\boxed{.522}$	-.017
37. Allocating teaching assignments.	$\boxed{.455}$	$\boxed{.495}$	.290
6. Resolving interpersonal conflicts among staff.	.306	$\boxed{.469}$	$\boxed{.423}$
7. Working with teachers who view administrators with suspicion and/or hostility.	.080	$\boxed{.443}$	$\boxed{.612}$
42. Experiencing a poor working relationship with your assistant principal(s).	.096	.040	.366
Eigenvalues	15.58	3.91	2.48
Percentage of total variance	36.2	9.1	5.8
Percentage of common variance	73.6	16.8	9.7

factor interpretation.

The three factors were labelled: Factor 1 -- "Role overload, conflict, and ambiguity," Factor 2 -- "Establishing consensus and gaining support," and Factor 3 -- "Interacting with personnel whose performance was unsatisfactory." The essential characteristics of these three factors are described below.

Factor 1: Role Overload, Conflict, and Ambiguity

As an organizational member and boundary spanner the principal of a school is subject to expectations communicated by individuals and groups both within and outside the school. Items within Factor 1 relate to the organizational and boundary-spanning aspects of the role of principal.

Role overload is experienced by a principal when legitimate and consistent work demands of the principal by individuals and groups both inside and outside the school organization exceed the principal's capacity to complete the work within a specified time period. Principals experience stress from being too rushed to complete tasks to their satisfaction; from performing duties with interruptions; from completing reports, questionnaires, and other paperwork; from having insufficient time to stop work and relax for lunch; and from having to reconcile the time demands of the principalship with the time demands of their families.

Role conflict is experienced by principals when role senders hold inconsistent expectations of the principal. The following items describe situations in which the principal is required to deal with conflicting expectations: item 4 -- "Resolving parent-teacher conflicts and misunderstandings," item 14 -- "Being caught as 'the person in the middle' between conflicting demands from teachers and central office administrators," item 15 -- "Suspending a student from school," item 16 -- "Dealing with student vandalism of school property," item 17 -- "Informing parents of their child's unsatisfactory behavior," item 18 -- "Having to make the final decision that a particular student will have to repeat the year," and item 33 -- "Having to implement Board policies without having adequate opportunities to provide input into policy formulation."

Principals also experience some stress when expectations from role senders are inadequately articulated. Role ambiguity items in Factor 1 include: "Having unclear role specifications from the Board and Central Office," and "Having unclear guidelines as to your legal rights and authority as principal."

Factor 2: Establishing Consensus and Gaining Support

The items which loaded on this factor describe work-related situations in which the principal is responsible not only for establishing consensus among staff, parents, the community, and Central Office in decision-making and policy-making but, also, for gaining the active support of these groups. For instance, in developing school policy the principal is instrumental in establishing consensus among staff as to what the policy should be. In promoting a positive school image the principal seeks, in effect, the active support of the community for the programs of the school. The school budgetary process in the Edmonton Public School System requires that principals consult staff and parents to establish reasonable agreement as to the allocation of school funds. While conducting staff meetings the principal is instrumental in directing proceedings with the ultimate purpose of establishing reasonable consensus. As part of the function of maintaining rapport and cooperation with all staff members the principal seeks to establish and maintain consensus and the support of staff members.

Factor 3: Interacting with Personnel Whose Performance was Unsatisfactory

Items within this factor describe work-related situations in which principals find themselves having to interact with teachers or support personnel whose performance principals perceive as unsatisfactory, unsupportive, ineffectual, or incompetent.

Most situations described in this factor occur infrequently in the principalship. Sometimes principals find that they have to reprimand a teacher for being late to school, dismissing a class too early, or not being on supervision. Circumstances may dictate that the principal present a teacher with a formal report on the unsatisfactory performance of the teacher. On other occasions the evidence against a teacher of unprofessional behavior may not be strong enough to justify direct intervention by the principal. In such circumstances principals may find that they have to tolerate a teacher whose attitudes they consider unprofessional. Sometimes principals delegate an area of responsibility to a staff member; that person performs poorly and, subsequently, the principal has to bear the consequences of that person's poor performance.

Frequency of Occurrence and Stress of Factors Derived from the Factor Analysis

The following are listed in Table 4.4:

1. the item composition of each of the three factors,
2. the mean score for "stress" of every item within each factor and the mean score for "stress" of each factor, and
3. the mean score for "frequency of occurrence" of every item within each factor and the mean score for "frequency of occurrence" of each factor.

The mean score for "stress" of a factor was computed by taking the average of the mean scores for "stress" of all the items within the factor. Similarly, the mean score for "frequency of occurrence" of a factor was computed by taking the average of every item mean score for "frequency of occurrence" within the factor.

The mean score of principals' responses to "stress" of the 14 items which comprise Factor 1 -- "Role overload, conflict, and ambiguity" -- is 1.41. This mean score indicates that principals perceived this factor as "mildly" to "moderately stressful." The factor mean score for "frequency of occurrence" -- 2.45 -- indicates a frequency between "about 1-3 times per year" and "about 1-3 times per month."

The mean score of principals' responses to "stress" of the nine items which comprise Factor 2 -- "Establishing consensus and gaining support" -- is 1.27. This mean score indicates that principals predominantly perceived this factor as "mildly stressful." The mean score for "frequency of occurrence" -- 2.48 -- indicates a frequency between "about 1-3 times per year" and "about 1-3 times per month."

Table 4.4

Summary of Factors Derived from the Factor Analysis and Factor Mean Scores for Stress and Frequency

Factor	Work-Related Situations	Frequency Means	Stress Means
1. Role Overload, Conflict and Ambiguity	4. Resolving parent-teacher conflicts and misunderstandings.	2.44	1.77
	14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	1.62	1.40
	15. Suspending a student from school.	1.64	1.59
	16. Dealing with student vandalism of school property.	1.74	1.02
	17. Informing parents of their child's unsatisfactory behavior.	2.78	1.18
	18. Having to make the final decision that a particular student will have to repeat the year.	1.63	1.42
	19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	4.34	0.92
	20. Performing duties with interruptions (e.g. telephone, students, parents, etc.).	4.82	1.16
	21. Having insufficient time to stop work and relax for lunch.	3.32	1.24
	22. Being too rushed to complete tasks to your satisfaction.	2.88	2.02
	23. Resolving the time demands of the principalship with the time demands of your family.	2.40	1.40
	28. Having unclear role specifications from the Board and Central Office.	1.44	1.44
	29. Having unclear guidelines as to your legal rights and authority as principal.	1.38	1.48
	33. Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	1.92	1.67
		$\bar{X}$(frequency) = 2.45	$\bar{X}$(stress) = 1.41
2. Establishing Consensus and Gaining Support	8. Conducting staff meetings.	2.98	0.86
	9. Dealing with a teacher whom you consider deficient in teaching skills.	1.64	1.56
	12. Maintaining rapport and cooperation with all staff.	4.10	0.78

Table 4.4(continued)

Factor		Work-Related Situations	Frequency Means	Stress Means
	13.	Developing school policy that all staff accept and actively support.	2.35	1.20
	26.	Establishing consensus among staff about budget issues.	2.00	1.45
	30.	Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office, or the Board.	2.06	1.13
	31.	Being criticized by parents or teachers for some of your administrative decisions.	1.78	1.88
	32.	Resolving in your own mind the expectations of your staff for you as principal.	2.20	1.46
	43.	Promoting a positive school image in the community.	3.22	1.08
			$\overline{X}$(frequency) = 2.48	$\overline{X}$(stress) = 1.27
3. Interacting with Personnel Whose Performance was Unsatisfactory	1.	Recommending the dismissal of a tenured teacher.	0.48	2.56
	2.	Recommending the non-renewal of a temporary contract.	0.68	2.23
	3.	Recommending the transfer of a teacher.	0.94	2.11
	5.	Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	1.92	1.64
	10.	Having to tolerate a teacher whose attitudes you consider unprofessional.	1.18	1.82
	11.	Presenting a teacher with a formal report on his/her unsatisfactory performance.	0.80	2.17
	36.	Having insufficient control over the appointment of teachers to your school.	0.90	1.76
	38.	Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	1.96	1.71
	39.	Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	1.42	1.65
	40.	Experiencing an inadequate level of advice and support from your Associate Superintendent.	1.16	1.79
	41.	Experiencing interpersonal conflict with your Associate Superintendent.	0.45	1.63
			$\overline{X}$(frequency) = 1.08	$\overline{X}$(stress) = 1.92

Factor 3 -- "Interacting with personnel whose performance was unsatisfactory" -- was perceived by principals as the most stressful of the three factors. The mean factor score for "stress" -- 1.92 -- corresponds to a group perception which was close to "moderately stressful." However, the factor mean score for "frequency of occurrence" -- 1.08 -- was relatively low, indicating that this factor occurred "rarely."

WORK-RELATED FACTORS AND INDIVIDUAL CHARACTERISTICS

1.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and principals' perceptions of the stress associated with work-related factors on the other?

An inspection of the distribution of responses by principals to "stress" of each work-related situation (shown in Table 4.1) revealed that principals' perceptions of stress ranged from "not stressful" to at least "very stressful" for each situation. Two individual characteristics -- Type A behavior and experience -- have been identified in the literature reviewed in Chapter 2 as potential moderators of principals' perceptions of stress. Hence, the associations between Type A behavior scores and experience of principals, and principals' perceptions of the stress of work-related situations were explored.

In the previous section of this chapter it was reported that an exploratory factor analysis of the 43 work-related situations described in the questionnaire revealed three descriptive factors. These were labelled: Factor 1 -- "Role overload, conflict, and ambiguity," Factor 2 -- "Establishing consensus and gaining support," and Factor 3 --

"Interacting with personnel whose performance was unsatisfactory." Pearson correlation coefficients were computed between Type A behavior scores, the length of experience of principals in their present schools, and the length of experience that principals had in total in the principalship on the one hand and principals' perceptions of stress as measured by the three work-related factors on the other. These correlation coefficients are presented in Table 4.5. Each of the four Type A behavior scores -- the overall measure of Type A behavior, Factor S (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-Driving and Competitive) -- was described in Chapter 3 under the heading: "Measurement of the Type A behavior pattern." Overall Type A behavior scores of the principals were reasonably normally distributed. Fifteen principals were predominantly Type A, 13 principals were predominantly Type B, and 22 principals had an approximately equal representation of Type A and Type B behavioral characteristics.

As shown in Table 4.5, the overall Type A behavior scores and the three factor scores of Type A behavior of principals were not associated with principals' perceptions of stress as measured by the three work-related factors.

Principals who had served longer in their present schools tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory (Factor 3) and in dealing with situations that involved role overload, conflict, and ambiguity (Factor 1). Furthermore, principals who had more years of experience in total in the principalship also tended to perceive more stress while interacting with personnel whose performance they considered

Table 4.5

Pearson Correlation Coefficients of Principals' Perceptions of Stress of Each Work-Related Factor and Selected Variables: Type A Behavior Scores and Experience of Principals

Work-Related Factors	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Present School	Experience in Total
1. Role Overload, Conflict and Ambiguity	.045	.198	-.012	-.158	.308*	.123
2. Establishing Consensus and Gaining Support	-.026	.030	-.091	-.190	.129	-.136
3. Interacting with Personnel Whose Performance was Unsatisfactory	.155	.098	-.164	-.058	.527***	.275*

* $p < .05$

** $p < .01$

*** $p < .001$

unsatisfactory (Factor 3).

A similar analysis to the above was also performed using each of the 43 work-related situations instead of the three work-related factors. This analysis is reported in Appendix C. The Pearson correlation coefficients between Type A behavior scores and experience of principals, and principals' perceptions of stress of each of the 43 work-related situations are presented in Table C.1. This additional analysis provided similar general findings as reported above. More specifically, Type A behavior scores of principals were not associated with principals' perceptions of stress of each work-related situation. Statistically significant but generally low Pearson correlation coefficients were computed between the three Type A behavior factor scales and principals' perceptions of stress of a small number of work-related situations. The measure of "experience in present school" correlated more often and more significantly than the measure of "experience in total" with principals' perceptions of stress of work-related situations.

Discussion

The literature suggests that as principals gain more experience they perceive work-related situations to be less stressful. Furthermore, the literature suggests that the early years of a principal's appointment to a school are more stressful because the principal lacks familiarity and experience of the operation of that school. Contrary to these expectations, principals who had served longer in their present schools tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory (Factor 3) and in dealing with situations that involved role overload, conflict, and ambiguity (Factor 1). An examination of the nature of these two factors suggests that the apparent inconsistency between the findings and the literature may be explainable in the following terms: The formation of closer professional and social ties between principals and staff would be expected the longer principals remained at their present schools. Furthermore, with an increasing number of years of service to their schools principals may develop stronger personal attachments to their schools. Hence, it may not be altogether surprising that principals perceived more stress, for instance, in having to confront a member of staff whom they had known for some time regarding that person's unsatisfactory performance; in resolving interpersonal conflicts among staff; in dealing with student vandalism of school property; and in being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.

SOURCES OF STRESS IDENTIFIED AND DESCRIBED BY PRINCIPALS

> *1.6. What work-related situations are identified and described by principals as very or extremely stressful and why are these situations so stressful?*

A semi-structured interview schedule (shown in Appendix B) was used to provide principals with the opportunity to identify and describe work-related situations that they had experienced as very or extremely stressful. In addition, principals were invited to give reasons why the examples they provided were so stressful. *A priori* analysis categories were not employed, rather the interview data were explored with the purpose of developing analysis categories directly from the data. It was anticipated by the researcher that if a foremost source of stress had been omitted from the questionnaire then principals would spontaneously identify that situation during semi-structured interviews. More importantly, the interview served as the basis for triangulation in the sense defined by Jick (1979:603-604). Specifically, the interview was used to capture a more complete, holistic, and contextual portrayal of the foremost sources of stress which were also identified later by the questionnaire.

Content analyses of the 36 interview transcripts revealed 21 work-related situations which principals described as having been very stressful. These work-related situations and the number of principals who identified each situation are presented in Table 4.6. Some situations were identified by as few as one or two principals. The researcher considered that it was neither efficient nor justifiable to analyze and report in detail each work-related situation that was identified by principals as very stressful. The number of principals who identified any particular source of stress was considered an estimate of the degree to which that source of stress was foremost in principals' minds. Only those sources of stress that were identified and described by 6 or more of the principals -- at least 15 percent of those interviewed -- were deemed to have been of sufficiently general importance to justify detailed analysis and description in the study. Hence, descriptions and analyses of the following seven foremost sources of stress from the preliminary list of 21 work-related situations shown in Table 4.6 are presented in this chapter:

1. Recommending the termination of employment or transfer of a teacher,

Table 4.6

Sources of Stress Identified during Interviews as Very or Extremely Stressful

Sources of Stress	N
1. Recommending the termination of employment or transfer of a teacher.	14[a]
2. Role overload.	12
3. Resolving parent-child-teacher conflicts and misunderstandings.	11
4. Parental demands and concerns.	10
5. Student discipline.	9
6. Resolving conflicts and misunderstandings between staff.	8
7. Reducing surplus staff.	8
8. Confronting or reprimanding personnel.	7
9. Management of unsatisfactory custodial staff.	4
10. Administrative constraints and inadequate authority.	3
11. Dealing with a power group among the staff whose philosophy is contrary to that of the principal.	3
12. Working with unsatisfactory secretarial staff.	2
13. Public speaking.	2
14. Having a teacher who was known to be unsuitable transferred into the school by Central Office.	2
15. Poor working relationship with the assistant principal.	2
16. Opening a new school.	2
17. Meeting program demands during a period of severe enrollment decline.	1
18. Poor working relationship with the Associate Superintendent	1
19. Student vandalism of the principal's car.	1
20. Conducting staff meetings.	1
21. Unfavorable media coverage.	1

[a] This means that 14 principals identified "Recommending the termination of employment or transfer of a teacher" as very or extremely stressful.

2. Role overload,
3. Conflict management,
4. Parental demands and concerns,
5. Confronting or reprimanding personnel,
6. Student discipline, and
7. Reducing surplus staff.

In the analysis that follows in this chapter "Conflict management" includes two sources of stress from the preliminary list of 21 work-related situations, namely: "Resolving parent-child-teacher conflicts and misunderstandings," and "Resolving conflicts and misunderstandings between staff."

A comparison of the foremost sources of stress identified during interviews with important sources of stress identified by questionnaire is provided in Table 4.7. A source of stress was considered "foremost" in principals' minds if it was spontaneously identified by 6 or more of the principals -- at least 15 percent of those interviewed. A potential source of stress listed in Section C of the questionnaire was considered "important" if (1) it was ranked in the first 20 sources of stress according to mean scores for "stress" as shown in Table 4.2, and (2) at least 8 principals -- 15 percent of *all* principals in the study -- rated the source of stress on the questionnaire as either "very" or "extremely stressful." There were 16 sources of stress from the questionnaire which satisfied the above criteria for "importance." These were grouped to correspond with equivalent sources of stress identified during interviews and listed in Table 4.7.

The sources of stress identified from interviews as "foremost" in principals' minds were: "Recommending the termination of employment

Table 4.7

Comparison of the Foremost Sources of Stress Identified during Interviews with Important Sources of Stress Identified by Questionnaire

Questionnaire			Interview	
Sources of Stress	Stress Mean	Number	Sources of Stress	Number
1. Recommending the dismissal of a tenured teacher.	2.56	16[a]	Recommending the termination of employment or transfer of a teacher.	14[b]
2. Recommending the non-renewal of a temporary contract.	2.23	14		
3. Recommending the transfer of a teacher.	2.11	14		
22. Being too rushed to complete tasks to your satisfaction.	2.02	14	Role Overload.	12
24. Contending with time pressures to complete the budget by the required date.	1.81	12		
6. Resolving interpersonal conflicts among staff.	1.94	13	Resolving conflicts and misunderstandings between staff.	8
4. Resolving parent-teacher conflicts and misunderstandings.	1.77	8	Resolving parent-child-teacher conflicts and misunderstandings.	11
31. Being criticized by parents or teachers for some of your administrative decisions.	1.88	12	Parental demands and concerns.	10
11. Presenting a teacher with a formal report on his/her unsatisfactory performance.	2.17	17	Confronting or reprimanding personnel.	7
10. Having to tolerate a teacher whose attitudes you consider unprofessional.	1.82	13		
5. Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	1.64	8		
15. Suspending a student from school.	1.59	9	Student discipline.	9
No item was included on the questionnaire about reducing surplus staff.			Reducing surplus staff	8

Table 4.7 (continued)

Questionnaire			Interview	
Sources of Stress	Stress Mean	Number	Sources of Stress	Number
40. Experiencing an inadequate level of advice and support from your Associate Superintendent.	1.79	11	[c]Poor working relationship with the Associate Superintendent.	1
36. Having insufficient control over the appointment of teachers to your school.	1.76	10	[c]Having a teacher, who was known to be unsuitable, transferred into the school by Central Office.	2
42. Experiencing a poor working relationship with your assistant principal(s).	1.70	8	[c]Poor working relationship with the assistant principal.	2
39. Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	1.65	9	Not identified by any of the principals interviewed.	

[a] This means that 16 principals rated item 1 -- "Recommending the dismissal of a tenured teacher" -- on the questionnaire as either "very" or "extremely stressful."

[b] This means that 14 principals spontaneously identified "Recommending the termination of employment or transfer of a teacher" during interviews as very or extremely stressful.

[c] These sources of stress were not considered "foremost" in principals' minds because each was spontaneously identified by fewer than 6 principals -- fewer than 15 percent of those interviewed.

or transfer of a teacher," "Role overload," "Resolving parent-child-teacher conflicts and misunderstandings," "Parental demands and concerns," "Confronting or reprimanding personnel," "Student discipline," "Resolving conflicts and misunderstandings between staff," and "Reducing surplus staff." All these sources of stress, except "Reducing surplus staff," corresponded to "important" sources of stress identified by questionnaire. Correspondence was not possible for the source of stress "Reducing surplus staff" because the questionnaire did not include an item about reducing surplus staff. Three of the remaining four "important" sources of stress shown in Table 4.7 -- items 36, 40, and 42 from the questionnaire -- corresponded with sources of stress identified from interviews. However, these sources of stress were not considered "foremost" in principals' minds because each was identified during interviews by fewer than 6 principals. Questionnaire item 39 -- "Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance" was not spontaneously identified as very or extremely stressful by any of the principals interviewed.

Clearly, the findings of the questionnaire and interview approaches to data gathering are reasonably consistent. Important sources of stress can be identified more quickly using the questionnaire. However, the more time consuming interview approach provides a more complete, holistic, and contextual portrayal of important sources of stress while it still identifies the same foremost sources of stress as the questionnaire approach.

Principals' descriptions of the seven "foremost" sources of stress identified during interviews are examined in the following seven sub-sections. In each of these analyses the focus is to gain a more fully grounded understanding of the very stressful aspects for principals of these work-related situations.

Recommending the Termination of Employment or Transfer of a Teacher

Fourteen of the principals interviewed spontaneously identified as very stressful the process of recommending the termination of employment or transfer of a teacher who they perceive as either unsuitable, ineffectual, or incompetent. This number of principals represents a considerable proportion -- 39 percent -- of the principals interviewed suggesting that the management of unsuitable, ineffectual, or incompetent personnel is a foremost source of stress in the minds of these principals. This observation is consistent with findings derived from quantitative questionnaire data. In Table 4.2 it was reported that three of the four work-related situations with the highest mean scores for "stress" are: "Recommending the dismissal of a tenured teacher," "Recommending the non-renewal of a temporary contract," and "Recommending the transfer of a teacher." However, it should be noted that even though these situations appear to be foremost sources of stress in the minds of a significant number of principals interviewed, quantitative data reported in Table 4.1 indicated that these occur "rarely."

Insights provided by principals into the stressful aspects of the process of recommending the termination of employment or transfer of a teacher are examined in the following sub-sections.

Unsuitable, ineffectual, or incompetent teachers. Teachers recommended for transfer were considered to have been unsuited to their schools by principals. These teachers were considered unsuitable in that they had severe personal, philosophical, or educational conflicts with the principal or staff, they failed to follow the established administrative procedures or philosophies of their school, or they had teaching and classroom management problems which may have been alleviated in a different school with students of a less challenging nature. The following comments were made by principals regarding teachers who were recommended for transfer to other schools. An elementary-junior high school principal stated that:

> She [the teacher] operated as though she was an island all by herself. She never saw any need to consult the office, just did what she wanted . . . she would set up field trips without consulting the administration . . . very independent and forthright . . . . We had open arguments in staff meetings. A real conflict of personality basically. We were so far apart philosophically and educationally there was no coming together, no compromise . . . .

The same elementary-junior high school principal described another teacher who was transferred as having been:

> . . . totally inflexible and not open to inservice. He [the teacher] taught the same way for eight years and would not consider new teaching strategies or new materials.

A composite high school principal stated:

> I had one teacher, very sincere, yet lacked the skill to interact with senior kids, lots of classroom management problems, so they [the students] got away with as much as possible with her . . . . The department head and I worked with her . . . eventually recommended that she seek a transfer . . . .

A junior high school principal explained:

> . . . being the eternal optimist that I am, I felt that things would work themselves out with coaching advice and assistance . . . . It blew up in our faces here not long ago when half of his [the teacher's] class rioted . . . . I was annoyed with myself that I had

> not realized until then that he was having real classroom management problems . . . he had developed a bad name for himself among the students.

Some principals felt quite strongly that members of staff should actively support the established school philosophy. For example an elementary school principal commented:

> I'm interested in the child oriented person, very understanding of the needs and interests of the children . . . . I make sure that each teacher is aware that each child has a positive experience once per day. We have developed that into our school philosophy . . . if I see people who are not following the philosophy I call them into the office and talk over the philosophy and tell them that if they aren't going to follow the philosophy then I'm going to be here next year and so is the philosophy so maybe they might like to look at an alternative school.

Principals' descriptions of teachers who were recommended for termination of employment were reasonably consistent. Such teachers were described by seven principals as "incompetent"; by two principals as "highly unsuitable for teaching"; by one principal as ". . . having been guilty of unethical kinds of behavior," and by another as ". . . inept, ineffectual, and detrimental to kids."

Principal perceived as an enemy. Typically a flood of parental complaints about a teacher initiated an investigation by the principal. Principals attempted to assess the alleged situation and then provide supervision or take some other form of action. An elementary school principal explained:

> I had parents who were all over me, but at the time I had to make sure that I was being fair to this teacher and I wasn't taking any action that was unjust as far as she was concerned. So it was a matter of observing her class, talking to her, and getting inside and outside evaluations of the teaching situation before I thought that I could fairly move in and say: You are going to have to leave because this is out of hand right now.

Those who attempted to provide supervision explained that the experience was very stressful if the teacher failed to make significant progress. For instance, an elementary school principal revealed that he ". . . spent the whole year trying to help her [a teacher] but finally realized it was not going to work." Other principals explained that it was very stressful attempting to supervise teachers who failed to recognize and refused to acknowledge that something was seriously wrong with their teaching. For example, a junior high school principal explained that he had found dealing with a staff member ". . . who had reached burnout and refused to admit it to himself or anybody else" a very stressful experience.

Principals who attempted to provide supervision reported that the experience was very stressful whenever the teacher misperceived their intentions and considered them a personal enemy. An elementary school principal provided the following insights into such a situation:

> She [the teacher] did not accept that I was working in her interests and actually she thought that I was working against her and I wasn't really. Yes, I was working against her in a way in that I had to make sure that the situation changed and improved but I was not working against her personally. I was not on the side of the parents or anybody else . . . .

Another elementary school principal expressed a similar point of view when she explained that:

> The most stressful aspect about that kind of situation [supervising a teacher who is having serious teaching problems] is when the teacher realizes that he is in trouble and considers me personally the enemy.

And, another elementary school principal said:

> It's very stressful when teachers feel that you are out to get them . . . .

A junior high school principal also explained that:

> . . . to start to attack one of those situations [a teacher who has reached burnout and refuses to admit it] bothers me because the way

> it is interpreted by the teacher is a personal attack at this point.

The following additional insight was provided by another elementary school principal:

> The most stressful part is when you feel that the teacher has lost confidence in you as a principal, in your judgement, in what you're saying, and in your ability to help them through a situation.

Clearly, an important element contributing to the stress experienced by principals who attempted to provide some supervision or assistance was that the teachers perceived the principal as working against their interests. Some teachers who considered the principal a personal enemy reacted by soliciting support from other individuals or groups.

Formation of an enemy camp. Principals explained that one of the most stressful aspects of the process of recommending the transfer or termination of employment of a teacher occurred whenever the teacher formed an "enemy camp" by soliciting support from other teachers. For instance an elementary school principal explained that she had been:

> . . . in the position where a teacher solicited support from other teachers . . . . She [the teacher] dug in her heels and formed an enemy camp . . . . When you find one teacher in trouble you find your school is beginning to split . . . .

Another elementary school principal revealed that some teachers attempted to solicit support from other sources:

> . . . the one teacher who I axed, she even tried to rally the community. She was very unsuccessful at it, . . . she even tried to rally the ATA [Alberta Teachers' Association], Alberta Education, Trustees, and so on against me . . . that was very stressful.

A junior high school principal explained that in his experience the process of removing a member of staff was very stressful because:

> . . . to move those people [teachers] you have to combat certain groups in the community, inter-staff hassles, even to the point of the kids . . . teachers are not above soliciting help from junior high school students . . . .

An elementary school principal also explained that the process of recommending the transfer or termination of employment of a teacher was very stressful because:

> . . . we [principals] have to be concerned with the ATA . . . I am also conscious of the teachers appealing to the Trustees and then getting a bad name in the community . . . .

It appears, therefore, that the process of recommending the transfer or termination of employment of a teacher is very stressful for principals because they have to deal with antagonistic reactions from the teacher and discord among staff. Furthermore, the conflict between principal and teacher often spills beyond the organizational boundary of the school as outside bodies such as the Alberta Teachers' Association become involved. Part of the stress for the principal of an escalation of such a conflict beyond the school is associated with the potential threat that the conflict poses to the security and self esteem of the principal.

Better to get rid of them than to keep them. Three principals argued that forcing the transfer or termination of employment of a teacher is in many respects the lesser of two evils. For instance the principal of a composite high school explained that:

> Even though it is very stressful going through the grind of getting rid of an incompetent tenured teacher it is more stressful in the long run retaining that teacher.

A similar point of view was expressed by an elementary school principal when he said:

> I cannot find any excuse for incompetence . . . . I cannot work with an incompetent teacher and I won't . . . . We [principals] have a responsibility to deal with incompetent teachers no matter how much stress it involves.

Another elementary school principal justified her decision to recommend the termination of employment of a teacher when she stated:

> I felt that someone had to do something; the children were more important than the teacher . . . . The important thing was that he was detrimental to the kids.

These principals had strong personal rationales for choosing to endure the process of recommending the termination of employment of a teacher rather than tolerate the continued employment of the teacher. Three principals reported that in certain cases requesting the termination of employment of a teacher was "not that stressful." One of these principals explained that ". . . it's easier if you are getting lots of calls from parents because then you have something concrete." Comments by the other two principals indicate that they considered the grounds for termination of employment to have been reasonably definite. For instance one principal commented that:

> . . . a lazy teacher is not all that stressful to me because I just get rid of them. Similarly, if we have lazy student teachers in the school we ask them to withdraw.

And, the other principal explained:

> . . . when I arrive at a situation where the person does require supervision and encouragement, and if after a period of time they have not welcomed suggestions and acted upon instructions then I don't find it that stressful to say: Okay, you know we have tried to identify these areas, you've agreed with these areas and if after a period of time these are not taken care of, I'm going to have no choice but to follow the standard procedures that are required by our Board and ask supervisory staff from downtown to evaluate the situation and, if necessary, request termination.

Summary. Even though principals rarely have to recommend the termination of employment or transfer of a teacher it is clear that this source of stress is foremost in the minds of a significant proportion of the principals interviewed. The very stressful aspects of the process of recommending the termination of employment or transfer of a teacher occur when (1) the teacher refuses to accept that something is wrong with his/her teaching, (2) the teacher considers the principal a personal enemy, and (3) the teacher solicits support against the principal from such individuals and groups as teachers, parents, students, the Alberta Teachers' Association, Alberta Education, and trustees of the School Board. Several principals explained that even though it is very stressful going through the process of recommending the termination of employment of a teacher it would be more stressful in the long term tolerating the continued employment of that teacher.

Overload

Crowson and Porter-Gehrie (1980:50) acknowledge that Mintzberg's (1973) description of managerial work as typically involving a great variety of communications, a rather hectic pace, and an extensive variety of tasks and functions reflects appropriately the daily work of principals. Twelve of the principals interviewed in this study spontaneously identified role overload situations as being very stressful. Three of these principals identified the volume of work demands as a very stressful aspect of the role of principal.

Volume of Work. It appears that, with the exception of the preparation of the budget document, principals are seldom involved in major projects. Typically, they deal with a multitude of demands, concerns, and crises of relatively short duration. However, the large number of student, teacher, parental, and Central Office demands and concerns constitute a large volume of work. Principals explained that they experience stress during those times when they have difficulty coping with a large number of relatively short duration demands and concerns. An elementary-junior high school principal provided the following insights into this source of stress:

> . . . in this situation [the principalship] it is the sheer volume and number of things that I have to do, and I literally always have the feeling that I can never catch up. Someone is always on the phone bugging me that this is due or that is due . . . . I find that with the elementary and junior high school kinds of concerns together there are times when I feel that I just don't know where to start . . . these are the most stressful times for me.

Another elementary-junior high school principal expressed similar sentiments when she commented that:

> On a bad day the problems never end. Take yesterday as an example. I had to cover a class for a substitute teacher who was late, three parents came to see me in the morning, I had a disagreement with one of my teachers who had cornered a kid and was demanding punishment that I felt didn't fit the situation, and I must have had eight phone calls, two of which were from downtown. On top of that a teacher came to tell me about the arrangements that she had made for a field trip only five minutes before I was due to leave for yesterday's area meeting [principals' zone meeting]. I had my lunch in the car on the way to the meeting.

Even though stress is experienced as a consequence of continual work overload, high levels of stress are experienced by principals particularly during those times when a multitude of demands, problems, and crises occur almost simultaneously.

Timing of demands. The principal of an elementary school with an enrollment of about 180 students explained that:

> From time to time in a small school you get a number of things coming at you at once. You have a lot of demands in terms of the role and if you find that they [the demands] hit you all at once then that is very stressful.

Another elementary school principal stated that, "Sometimes in schools we are involved in crisis management and a lot of things happen at once . . . and you have too many things to deal with at once." Clearly, principals were describing essentially a problem of timing. None of the demands separately was considered beyond principals' abilities to cope. However, the demands all required the immediate attention of the principal and it was difficult for the principal to defer dealing with any of these problems. An example of such a very stressful demand overload situation was provided by the principal of a "one-administrator" elementary school:

> . . . last week I had a class that I teach starting straight after lunch hour, so I was required in one of the classrooms at that time. I had a parent come in to see me about a problem that could not wait. She had to see me at that particular time. Plus, there was a student as well [at the principal's office] who needed some attention [and the student was] accompanied by a teacher. I had three choices -- there were three crucial activities that I should have been involved in all at once.

The principal explained that this situation was very stressful because he had an obligation to his class, he felt an obligation to the parent, and he had a teacher who should have been in class "tied up" with a student who needed "some disciplinary attention."

Unforeseen demands. Two principals identified the "unforeseen" nature of some demands as being very stressful. One of these principals explained that:

> When something is unexpected it's stressful, otherwise when you know things are coming -- such as the budget -- you can plan for them. Even though it's stressful at the time, you can make sure that everyone who should be involved has been involved . . . .

The other principal stated that even though he attempted to plan his work program, considerably less work was achieved than anticipated because of the many unforeseen problems and demands that occurred during a typical day. To illustrate this source of stress the principal stated that, ". . . we [the school] are geared to be responsive to people when they come to the office; that is a priority that we have placed on ourselves. We are people oriented . . . ." And, as a consequence, the principal explained, ". . . whatever planning I try to do is suddenly just gone and what should have taken 20 minutes has taken three-quarters of an hour . . . it's the barrage of unforeseen demands that makes my work very stressful."

Deadlines. Five principals also identified externally imposed "deadlines" as a source of stress. The most frequently mentioned "deadline" was the completion of the school budget document. A junior high school principal commented that, ". . . the deadlines are critical and if you don't meet them you'll be canned for it." However, it appears that deadlines *per se* were not necessarily stressful. If major projects, questionnaires, or reports were all required within a short time period, or if major deadlines were required during periods of the year when principals were normally experiencing higher frequencies of school-related demands then some principals experienced very stressful overload. Support was provided for this observation by an elementary school principal who said that even though he attempted to plan and prioritize his work it was still very stressful having to deal with:

> . . . the pressures of deadlines and demands placed by sources external to the school, whether it be the associate superintendent or various departments downtown that want something done by a certain time -- sometimes they [deadlines and demands] tend to all occur at once.

Another principal of a "one-administrator" elementary school provided further insights into the experience of role overload which occurred during a period of the year when crisis management demands of the principal were frequent and a major deadline -- the preparation of the school budget document -- was pressing:

> The preparation of the budget document since Christmas has been very stressful in that I couldn't devote my entire self to doing that -- that had to be in addition to the day-to-day routine of the school along with my teaching duties . . . . I really enjoy doing that -- preparing the budget. But I found it stressful because I had that piled up on top of coming to grips -- doing things -- fighting the fires [management of crises] that happen very frequently in a school in January to March. That's a pretty heavy time of year for teachers; all of us, because that's when you grind through all the curriculum -- the heavy stuff. It tends to relax at Spring break because all of a sudden you are planning -- you're winding down as far as the school year goes. But there is a time when your teachers are up in the air -- the long winter with the snow -- so that they are under pressure and therefore they snap at children a little bit more and demand more of your attention in dealing with discipline problems or with things they want relieved in some way. So I had to -- feeling the stress that I had -- try to appear, not casual, but able to go around with a smile on my face . . . .

Self-imposed overload. Comments were provided by two principals indicating that, for them at least, role overload was to some extent self-imposed. One of these principals who was in his first-year of a principalship stated that:

> . . . they say that in jobs like ours the work is never done. You have to prioritize and choose what you are going to do and put aside what you feel is not important. Being somewhat new at the job, I don't think that I have discerned that [the important from the less important] as well as I will sometime in the future. I tend to want to do the best job possible on anything that comes along and I think that probably has increased the amount of work and writing that I have done throughout the year. It seems as though there isn't enough time in a day with all the little decisions that have to be made and interruptions to get it done . . . .
>
> The work load is quite tremendous in a one-administrator school particularly for new administrators who don't choose quite well as to what is important and what isn't.

The other principal admitted that:

> . . . I'm just not a good time manager. I create more work for myself simply because I do not do the jobs that I could do when I have the time to do them.

> The days when I feel most frustrated going home, and therefore create stress for myself, is when I have not done some of the things that I should have done on that day. It wasn't because I didn't have the time. I just didn't feel like doing them. I found it easier doing something else. I would attend to a minor problem like filling in some piece of paper that downtown [Central Administration of the Edmonton Public School Board] wanted and which was for a deadline a week or so away. It became more important to me to do that at that time than maybe get my budget document finished, which was really much more important, or to follow through something for a student or a teacher which required a lot more thinking on my part.

Summary. A few principals identified the "sheer volume and nature" of demands in the principalship as being very stressful. Most principals did not describe role overload as occurring continuously or uniformly throughout the school year. It appears that very stressful overload occurs in an unpredictable manner. There are periods during some days when several pressing problems and demands simultaneously require the attention of the principal. Sometimes a whole day is taken up with what seems to be a relentless flow of demands, problems, and crises. Very stressful role overload periods occur during those months of the year when school-related problems, crises, and demands are more frequent and, in particular, when important deadlines are also pressing.

Conflict Management

Conflict has been defined by Nebgen (1978:1) as ". . . any situation in which two or more parties perceive that their goals are incompatible." Nebgen (1978:1) claims that conflict among teachers, administrators, parents, and students is common in school settings. The findings of this study reveal that the school principal plays an important role as manager of conflict situations. Two types of conflict situation were identified by principals as being very or extremely stressful to resolve. These are: (1) situations in which the principal acts as mediator of parent-child-teacher conflicts and misunderstandings, and (2) situations in which the principal is called upon to resolve interpersonal conflicts and misunderstandings between members of staff.

Findings of the study indicate that the management of conflicts is an important source of stress for principals. In Table 4.1 it was reported that 17 percent of the principals found item 4 -- "Resolving parent-teacher conflicts and misunderstandings" to be "very stressful." A higher proportion of the principals interviewed -- 31 percent -- spontaneously identified situations in which the principal acts as mediator of parent-child-teacher conflicts and misunderstandings as being very stressful. Furthermore, it was reported in Table 4.1 that a total of 28 percent of the principals found item 6 -- "Resolving interpersonal conflicts among staff" to be "very" or "extremely stressful." A comparable proportion of the principals interviewed -- 22 percent -- identified situations in which the principal is called upon to resolve interpersonal conflicts and misunderstandings among members of staff as being very or extremely stressful.

Some insight into why it is that principals find the management of conflict very stressful was provided by an elementary school principal when he commented that:

> . . . I find that 90 percent or more of my stress comes from relating to individuals whether it's teachers, students, or parents. Stress develops because I have to represent fairly so many different interest groups; to try to keep a balance between all of these -- teachers on one hand, kids, parents, and Central Administration on the other. There is, I find now, a tremendous balancing act on. You are trying to represent fairly all these different interest groups that impinge upon one another.

More specific insights into the stressful aspects of the "mediator of conflict" function of principals are examined in the following two sub-sections. The first deals with the role that the principal plays as mediator of parent-child-teacher misunderstandings and conflicts. In the second sub-section descriptions of several interpersonal conflicts among members of staff are presented and the stress for principals in resolving such conflicts is examined.

Resolving parent-child-teacher conflicts and misunderstandings. Principals explained that parent-child-teacher conflicts and misunderstandings typically occur when parents allege that their child has been mistreated by a teacher. Principals usually act as the mediator in these conflict situations. The conflict normally comes to a climax in the principal's office when the parents confront the principal about the teacher's behavior. An elementary school principal described his initial impressions and reactions to such a conflict as: "The parents and child were upset, the teacher was upset, and my first line was staff defense." However, it appears that principals often have difficulty defending the teacher because in the principal's perception of the situation the teacher has committed some indiscretion. Typically, principals are caught in the middle of these conflicts -- torn between supporting the teacher on the one hand and the parents on the other. An elementary school principal provided the following illustration of such tension for principals:

> I found that situation [a parent-teacher conflict] very stressful because the teacher was in trouble and knew it. He [the teacher] needed some support and it was hard for me to give him support and still support the parent. Both of them needed my support, so in that sense I was a mediator, but I was torn between the conflicting kinds of expectations that came from the different parties to the conflict.

A similar comment was provided by another elementary school principal when he stated that:

> . . . the most stressful type of situation is when you [as principal] end up in a conflict involving parent, child, and teacher -- those kinds of situations where you find that you cannot support any or either of the parties involved.

The principal of an elementary school provided the following description of a parent-child-teacher conflict to illustrate her role as mediator of such conflicts and to highlight the tensions that she had experienced during this conflict:

> Recently I had very annoyed parents come into my office. The parents thought that their child was being treated unreasonably . . . they were screaming, particularly the mother, a lot at the teacher.
>
> It's tough enough dealing with your own problems. If I have done something that upset someone then I have to resolve that myself. However, when you are resolving somebody else's problem -- like for instance a teacher's problem -- that is very stressful for me.
>
> This child came home and told them [the parents] that this teacher was treating her unfairly. She was in my perception an intelligent, pretty, and spoilt little girl. The parents treated her as if she was a cute little kindergarten kid and even during the interview they had her on their lap. They never questioned anything she said against the teacher. I think what she said was slightly exaggerated for their benefit . . . I was not totally convinced that the teacher was not partially at fault . . . .
>
> I like "win-win" type negotiations. Somehow the child had to learn something from this mess -- she had made herself very unpopular with the teacher --, the parents had to learn, the teacher had to learn, and I did too. And, somehow we all had to end up feeling happier, but at that point nobody was happy . . . . It was a conflict management kind of thing. It went on for about two hours. I could have reacted to their [parents] first statement which was: Our child is being treated unfairly here, we are transferring her to another school. But, I felt that I should try and put myself into their position and examine whether I could be so angry about the treatment of my own child as to react in the same manner. I felt that they had a right to come in and complain. I think that people are quite emotional at the beginning of a conflict. So I realized that I had to sit there calmly and we had to keep talking. It is like lancing a boil, it's going to be painful for a while but eventually it will get better . . . . As a matter of fact I had a phone call this morning from the mother who was the real angry one and she thanked me again for taking that much time for dealing with the conflict and that their daughter had improved dramatically at home. And, how was she at school?

> I really feel that all of us learned something from it. But the situation was very stressful because I didn't know at the time that it was happening if I had the ability to resolve it. I also didn't know if those people [the parents, child, and teacher] had the ability to do something about it . . . .

Clearly, the principal acted as mediator of this conflict. It was important that she was perceived to be representing fairly both parties to the conflict. A very stressful aspect of this situation for the principal was that she realized that both parties needed her support but it was difficult for her to support the parents who she felt were making an exaggerated claim and the teacher who she felt was partially at fault. The principal also explained that a very stressful aspect was not knowing whether she had the ability to calm the parents down and help both parties understand each other's perspective of the conflict. In a sense, the threat of failure to resolve the conflict to the satisfaction of all parties was a very stressful aspect for the principal. Another elementary school principal also identified the threat of "irresolution" as one of the most stressful aspects of parent-child-teacher conflicts. The same principal said that, ". . . irresolution is a killer -- it's the irresolvables that really wear thin on me . . . ."

While principals endeavor to support the teacher in these conflicts there are limits to that support. For instance an elementary school principal stated that, "I have told staff that while I support them in what they are doing, I will not lie to parents." Another elementary school principal explained that, "When the teacher has done something wrong I find it difficult to support fully the teacher." It appears that herein lies one of the reasons for the excessive stress that some principals experience as they attempt to resolve certain parent-child-teacher conflicts. While feeling a strong obligation to provide support to the teacher, principals have to accommodate their own beliefs and values in providing that support. The principal of a junior high school explained further:

> A very stressful situation is one in which you [as principal] are placed in a position where you have to evaluate the situation and there are perhaps two or three interests, and you have to act in a manner which may not go against your general philosophy, but which certainly bends it to the point that you have to bastardize your own values somewhat for the situation as a whole . . . . A classic example would be a teacher doing something in anger which he knows is completely wrong. You know this person is a fine individual, very well qualified, and has displayed tremendous teaching talent. But he gets himself into this bind. You have to compromise the situation by blending in a number of situations where the good shall defeat the one bad. And, it's a very stressful situation. You go to bat for this teacher even though you have an individual such as a parent or a student who can't possibly appreciate the entire situation. This is extremely compromising because, whether you like it or not, you have to bend your own values to save the teacher . . . . If the parents, the students, or the teacher leaves unhappy with the final outcome, you know you may have calmed the matter down but you certainly haven't resolved the situation . . . .

In contrast to the other principals cited in this section, an elementary-junior high school principal stated that she had not had "particular difficulty" resolving situations in which parents had complained about "inappropriate" behavior of a teacher toward their child. This elementary-junior high school principal gave the following reason and example to provide insight into why it was that she had not found such situations very stressful to resolve:

> I have never found the parents to be totally unreasonable. All teachers make mistakes and I think that has to be put out in the open. I can think of a situation last year. A teacher pulled a kid's hair and that is not appropriate behavior for a classroom or anywhere else. After talking to the parents and talking about that kind of situation my job became one of saying: No, that's not appropriate behavior but I also want you [parents] to understand the pressures that the teacher was under at the time and I think we can probably work this out. That's what I did with the parents. Then I went to the teacher and I said: That is ridiculous behavior

> and you cannot do that in a classroom, and now we have these upset parents. How are we going to deal with it? I guess the easiest is to explain your situation and then apologize for the situation. That's how it is usually handled and both parties end up being satisfied.

Resolving conflicts and misunderstandings between staff.

Principals explained that "minor" disagreements, dissensions, and conflicts between members of staff occur frequently in school settings. These conflict situations are considered constructive for schools in general and an important element in effective decision-making processes. Such "typical" educational and philosophical disagreements are considered a minor source of stress for principals because these situations are relatively easy to resolve with open dialogue between conflicting parties.

Severe interpersonal conflicts between members of staff occur infrequently. "A real upheaval among staff" was described by one principal as a situation in which factions tend to form as opposing parties to the conflict rally support among other members of staff. Principals play an important role as mediator of these conflicts. Opposing points of view are often focused on the principal and, in many respects, principals are caught in the middle of these conflicts. One principal explained that he found severe interpersonal conflicts between staff very stressful to resolve because he ". . . had to arbitrate and be seen to be treating both sides in the dispute equally and fairly."

Five principals explained that staff conflicts which are very stressful for principals to resolve are often personality conflicts. For instance an elementary school principal stated that:

> . . . it is very stressful having to deal with personalities of teachers. Sometimes you run into someone who is just not clicking

> with some other member of staff and things are also not clicking between you and that person. You really can't put your finger on it, but you know it is not working and you want it to work. Somehow you suspect it is a fundamental personality incompatibility.

Another elementary school principal also identified staff conflicts which are very stressful for principals to resolve as severe personality conflicts:

> The most stressful situation that I can remember occurred when there was a severe personality conflict on staff. No matter what I attempted to do, I could not get the two teachers to work together. I suppose fundamental personality conflicts are irresolvable because you can try as much as you like you are not going to change somebody's personality.

Conflicts involving very angry participants are very stressful for principals to resolve. A principal provided the following insights into the stress that she experienced as she was confronted by a very angry staff member involved in a conflict with another member of staff:

> I find it very stressful handling people who are super angry on the spot . . . . I have never been very good at dealing with people whose eyes are bugging out of their heads and they are in a violent rage -- particularly men. I guess that I am making a value judgement about them but I find their behavior childish . . . .
>
> A teacher flew into here [the principal's office] just a few weeks ago and slammed the door. "What are you going to do about . . .?" My reaction was that without any information it was hard for me to react about whatever it was he was talking about. And, until I could get him calmed down, I found that very stressful. I guess it's fear of not being successful at calming him down and getting him to a point where he was talking rationally . . . .

Principals also explained that severe interpersonal conflicts between two staff members tend to permeate a school organization as opposing parties solicit support from other members of staff. An elementary school principal in referring to an interpersonal conflict between two members of staff commented that, ". . . the teachers were talking to each other about the situation in private and it was clear that some were starting to take sides." Another elementary school principal explained that the most stressful aspect of such conflicts was ". . . having to be in the middle and having to arbitrate in some way." A principal described the following conflict between two teachers to provide additional insights into the stress that he experienced as he was "caught in between" the two teachers while attempting to resolve the conflict:

> Last year we had two teachers teaching a similar program and I had expected that this would be a team teaching and planning situation. I was new to the school and did not realize that they were not compatible. One of them, I was told, had been a crackerjack teacher but last year she was having some personal problems of her own. The other teacher was new to the school. She had all the bright ideas, she was a quick worker and had a background in behavioral management. Early last year it was apparent to me that they were highly incompatible because each came to me complaining about the other. I was sort of caught in between them. The staff became aware of the problem because they [the teachers in conflict] talked about each other to the staff. The situation exploded in February when one of the teachers complained that the teachers' aide was supporting the other teacher. It was extremely stressful for me because she accused me of favoring the other teacher. The tension lasted until the end of the year when the teacher who was having the personal problems decided to leave. One of them had to go -- there was no other solution, they disliked each other that much in the end.
>
> We had a poor working climate on staff last year and I attribute a lot of that to this conflict . . . things are far from perfect here but it's 100 percent better than last year.

Summary. Conflict management is a potentially very stressful function of the principalship. Two conflict situations were identified by principals as very stressful to resolve. These are: (1) situations in which the principal acts as mediator of parent-child-teacher misunderstandings and conflicts, and (2) situations in which principals attempt to resolve severe interpersonal conflicts between staff.

Parent-child-teacher conflicts typically occur when parents allege that their child has been mistreated by a teacher. Principals explained that they find the role of mediator of certain parent-child-teacher conflicts very stressful because: (1) it is very difficult to get conflicting parties to understand each other's perspective of the problem, (2) it is difficult for the principal to support one or all parties even though these parties need support, (3) it is sometimes necessary for principals to compromise their own beliefs and values to support a teacher in a conflict situation, and (4) it is uncertain during the early stages of the conflict whether the principal is capable of resolving the conflict and/or that parties to the conflict are able to make the necessary readjustments to achieve a compromise.

Severe personality conflicts between members of staff are very stressful for principals to resolve. Some of these conflicts tend to permeate a school organization as opposing parties solicit support from other members of staff. Principals are sometimes caught in the middle of opposing factions feeling obligated to arbitrate in a manner that is perceived to be fair to all parties.

Parental Demands and Concerns

Crowson and Porter-Gehrie (1980:65) describe the principalship as the "pivotal exchange point" of the school hierarchy. It is through the principal's office that parental demands, expectations, and concerns flow into a school organization. The principal is usually the first person contacted by parents who have some school-related concern. In the capacity of organizational representative and guardian the astute principal performs a most delicate balancing function. While being sensitive to parental demands and concerns the principal must also protect the collective interests of the school and the integrity of individual members of staff. The process of reconciling these elements is a stressful experience for some principals.

Principals in the study do not necessarily experience stress dealing with parental demands and concerns *per se*. However, dealing with parental demands and concerns which principals perceive as being unreasonable or unfounded was reported to be very stressful by 10 of the principals interviewed. Even though parental demands and concerns may be valid, at least from the point of view of parents, what seems to be an essential element in determining the stress experienced by principals is that principals perceive the demands as unreasonable and the concerns as unfounded. The manner in which parents present their demands and concerns to principals has an additional bearing on the stress experienced by principals. Insights provided by principals into these and other stressful aspects of parental demands and concerns are examined in the following four sub-sections.

Immediacy of demands and concerns. Demands and concerns of parents require, at least from the point of view of parents, immediate attention. An elementary school principal explained that ". . . parents phone in and say that they want to see you and could they come in immediately." The same principal added that, "Sometimes parents arrive without making arrangements and you don't know what they are coming to see you about." The concerns are of immediate importance to the parents; they want an immediate conference with the principal, and the principal is expected to put aside whatever he/she is doing to direct his/her attention to the concerns of the parents. Additional insights into the nature of very stressful parental demands and concerns were provided by an elementary-junior high school principal when he stated that:

> . . . the number of telephone calls that I get from parents in a week is phenomenal and nearly every one is a demanding kind of phone call . . . . Demands are usually focused on what is happening to their child with a particular teacher and it is the teacher's fault [according to the parents] . . . . They [parents] are extremely critical of teachers, especially new teachers . . . and they want a conference set up as soon as possible to talk about these matters.

As a consequence of a "demanding kind of phone call," the same principal explained that it was necessary to ". . . set up a conference to meet these people [parents], and you are looking at an hour every time, so you get a tremendous number of follow-up conferences as a result of a telephone call."

Unreasonableness and unfoundedness of demands and concerns. Dealing with parental criticisms *per se* is not necessarily stressful for principals. It seems that parental criticisms which are perceived as valid by principals are welcomed and appreciated. For instance, an elementary-junior high school principal stated that, "Some demands are legitimate . . ., and I look forward to a perceptive parent being aware of something that I'm concerned about myself." However, principals described as very stressful parental demands which they perceive as unreasonable, and parental concerns and criticisms which they perceive as unfounded. Demands are considered unreasonable in terms of their substantive content and manner of presentation. The following description by an elementary-junior high school principal of an anticipated situation illustrates what was considered by this principal an unreasonable manner of presenting demands:

> I'm just bracing myself now because there are two classes in the bilingual program at each grade level and so of course as they

> [students] move along there are two choices of teachers. Everybody in the community knows who is the good teacher, so they think. And the pressure is on, and all the tricky ways they [parents] have of giving you reasons for why their child should be in this classroom or that classroom. I never give an inch to any of them. But in the meantime you have these very stressful kinds of phone calls where people are making demands on you and you are resisting them and it makes for a confrontation kind of a thing.

This principal considered that he had an organizational responsibility to balance the teaching assignments of the two teachers. Whether he agreed with the assessment by the community that one teacher was better than the other is to a large extent immaterial. For organizational reasons he could not allow a mass transfer of students from one class into the other. What seems to have been an important determinant of his stress experience in the past of similar situations has been the "tricky" manner in which parents have presented reasons for having their child change classes. The principal also experienced stress in having to resist these demands.

Stress is experienced by some principals when, in the opinion of these principals, parents over-react in their attempts to force their demands. For instance, a junior high school principal stated that, ". . . some [parents] have gone as far as phoning the Minister of Education." An elementary-junior high school principal added that, ". . . there isn't a thing that I do around here that I don't hear about from parents . . . . I'll hear from a delegation of parents and letters are sent to the Minister of Education, the School Board, the Superintendent, and everyone else they think might be interested." Clearly, the manner of presentation of the demands was perceived by these principals as having been unreasonable.

Parental demands and criticisms considered unreasonable in terms of their substantive content are also perceived as very stressful by principals. In the opinion of principals these unreasonable demands are either based upon (1) faulty information, (2) exaggerated perspectives, or (3) a lack of familiarity with the school context. An elementary-junior high school principal commented that he ". . . found it very stressful dealing with unfounded criticism." And, an elementary school principal expressed a similar point of view when he explained that, ". . . it's very stressful when parents come in complaining about something and eventually it becomes clear that they have got the wrong information somehow -- usually it's from their child."

Some parental demands are considered unreasonable because, in the opinion of principals, the parents exaggerate a problem that is known to exist. For example, an elementary school principal who had a major conflict with a parent explained that:

> She [parent] made unreasonable demands of the teachers, . . . all kinds of accusations towards the teachers -- poor teaching, poor control, poor this, poor that, . . . usually her problems were real but she was unreasonable in her demands because she exaggerated . . . .

A junior high school principal explained that he found dealing with ". . . the parent who blames everything on the school regardless of the situation . . . and from whom you get no cooperation . . . ," as very stressful. The same principal added that these parents have a very poor understanding of what the school is attempting to achieve and what it is like to be a teacher. Further insight into demands that are based upon a lack of understanding of the school context was provided by an elementary school principal who explained that situations which he finds to be very stressful are ". . . the ones where parents start making demands on the program which I feel are out of line with the direction that we [the school] have established for the program."

Clearly, principals' perceptions of the "unreasonableness" of parental demands is an important element in the very stressful situations alluded to above. Additional stress is experienced by some principals because of the difficulty that they experience in getting parents to accept or understand a "more realistic" perspective.

Establishing a more realistic perspective. An elementary school principal identified this stressful aspect of dealing with "unreasonable" parental demands and concerns:

> . . . what they [parents] perceive is a major problem isn't really a major problem . . . the situation is very stressful as you try to bring parents down and help them get things into proper perspective.

Furthermore, dealing with "unreasonable" parental expectations for their children was identified by two principals as very stressful because of the considerable difficulty that they experienced in getting parents to accept or understand a "more realistic" perspective. One of these principals explained that, ". . . they [parents] aren't always on the same wavelength as you are; they can't accept what you tell them about their children." The other principal expressed a similar point of view when he explained that:

> The things that cause very much stress for me are the things that I can't do anything about; for example, the parents who have completely unrealistic aspirations for their child, . . . and you've done as much as you can to make them realize that their child is not going to be a doctor . . . and they still do not accept a more realistic perspective.

Difficulty in determining the facts. As noted earlier, principals perceive some immediate and pressing parental demands and concerns as very stressful. However, early resolution is not always possible because the nature of these parental concerns is such that it is difficult for the principal to establish quickly the "facts" of the issue. The following situation was described by the principal of a small elementary school as an example of a parental concern that required quick resolution. However, this was a very stressful situation for the principal because he experienced difficulty in establishing the "facts" of the case.

> Parents came to see me; they knew me quite well . . ., and they came with the story that the substitute teacher had badly mistreated their daughter. They were very upset. The child had come home after school, the day before, complaining about this teacher. They had talked to the daughter about it, and this was the next morning, and obviously they were very upset. They had spent considerable time discussing it. They had a lot of time, the more they talked, the more upset they became . . ., they came to me in a very agitated mood.
>
> Substitute teacher problems are particularly difficult because they come and go in a day or two days, and if you don't deal with it quickly you are going to have an aftermath of an unresolved problem. In a situation like that you are almost always going to get into a confrontation. You are going to have to manipulate that confrontation and get the facts out -- get the facts out onto the table so that you have got something to deal with.
>
> . . . the last time this happened, last year, we had quite an interesting confrontation. The parents were quite hostile, the substitute teacher was quite ignorant -- could not understand what the problem was. We went through the story. I repeated first of all what the parents said -- they were actually too agitated to say anything; they couldn't repeat it for the sake of the substitute teacher and to help the substitute teacher understand what was the nature of the complaint. And, when they [parents] discovered that she couldn't quite recall this, they were even more agitated; they thought: How could she forget what she had done? And then we started getting down to real specific facts -- It must have been at this time. Yes, that's what she said you were doing -- and then we started getting out the facts. When we were finished, the parents went away satisfied because they understood what their daughter had done, and they understood how the substitute teacher had reacted. And, though they weren't totally satisfied that she [substitute teacher] had behaved really well, they knew it was not

> as unreasonable as the daughter had led them to believe.
>
> The substitute teacher was gone the next day. She was there for two days and then she was gone. Had I not gone into this situation and had this confrontation and got the facts out then and there, we may never have got the facts out. The parents may have gone thinking -- well, the school can't handle this kind of thing and substitute teachers are terrible -- and we would have a bad attitude developing in this family which could last for a long time.
>
> I don't like that kind of thing; I'd rather deal with the facts . . . . And, if they [parents] go away with the feeling that there is something wrong with the school then there is something wrong. I never want them to think there is something wrong without knowing the whole story . . . .
>
> . . . any time that you have to deal with these differing expectations and there are restrictions that force you to deal with them quickly, and you get into intense confrontations, and you have to manage them very quickly and smoothly to get all the facts out . . . these situations I find very stressful.

Summary. Principals do not necessarily experience stress dealing with parental demands and concerns *per se*. It seems that parental criticisms which are perceived by principals as valid are often welcomed and appreciated. An essential element of stressful demands and concerns is that principals perceive these as unreasonable or unfounded. The immediate and pressing nature of these demands and concerns has an additional bearing on principals' experiences of stress. Principals also explained that they often cannot satisfy demands or resolve concerns because of the difficulty they experience in getting parents to understand or accept a "more realistic" perspective. In addition, one principal explained that while parents were pressing for the immediate resolution of their concerns, he experienced excessive stress because the nature of these parental concerns was such that it was difficult to establish quickly the "facts" associated with the concerns.

Confronting or Reprimanding Personnel

Seven of the principals interviewed identified and described the process of confronting or reprimanding a teacher as very stressful. However, most principals seldom have to confront or reprimand teachers. More specifically, it was reported in Table 4.1 that item 5 -- "Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision)" occurred "rarely" for 25 percent of the principals; "about 1-3 times per year" for 56 percent of the principals; and "about 1-3 times per month" for the remaining 18 percent of principals.

Principals typically confront teachers regarding behaviors considered by principals to be "inappropriate," "neglectful," or "unprofessional." Examples of such behaviors provided by principals during interviews are: "taking too long for coffee breaks day after day," "failing to do assigned supervision," "having been late too often," "neglecting duties," "smoking in staff meetings when it was agreed that there would be no smoking," "being derogatory to children about their behavior," "failing to submit work on time," and "poor teaching practice . . . for example, bouncing a child out of class two minutes after the lesson starts." The following additional insights were provided by an elementary-junior high school principal into the nature of behaviors of a teacher who continued to regress to the stage where this principal felt compelled to approach the teacher regarding his behavior:

> We have one teacher [on staff] who is an extremely strong teacher but last year he began not to get along with staff, to make staff members unhappy, to get very unreasonable wanting things for himself -- like wanting other teachers to cover classes for him but never reciprocating --, to be in an unhappy mood all the time, very

> negative, refusing to get things in on time, no excuses, and it kept building . . . . Probably one of my faults was that I should have dealt with it earlier but I kept thinking he is a good man; he will come around. He didn't and it got to a point where I had to sit down with him and my assistant [principal] and counsel him about his behavior. I found that very stressful but after it was over, whether the interview was good or not, I found it relaxing because I got it off my chest . . . .

The above description also reveals that the most stressful aspect of the situation for this principal was the actual confrontation of the principal and teacher. An elementary school principal also explained that he found the actual moment of confrontation to be very stressful because he was "positive striving" and did not like saying negative things to people. Another elementary school principal also added that:

> Well, from my standpoint I don't think there is anything more stressful than staff relationships where you have to take an individual to task over an action on their part . . . . I'm talking about an individual, who regardless of any discussion that you have had in the past, is continuing along a behavioral pattern that requires a severe confrontation.

A composite high school principal provided the following explanation for why it was that the actual confrontation was very stressful for her:

> . . . if one of my teachers has done something unprofessional and I have to talk to them and sort it out I feel ashamed . . . perhaps that shame is the stress of being human as well as the stress of being a principal . . . .

The post-confrontation period was also described by an elementary school principal as very stressful because:

> . . . you are looking over your shoulder wondering, and I suppose the other person is too, what the relationship between yourself and that individual is going to be the next time you meet. And, should something else come up, can that be handled on a regular basis putting the other situation aside?

The same principal explained further that he was conscious of the "frigid relationship" that could follow a principal-teacher confrontation and this for him ". . . was the most stressful aspect."

Two principals stated that they found it less stressful confronting and reprimanding a teacher whose behavior was considered inappropriate, neglectful, or unprofessional than tolerating the continuation of such behaviors. One of these, an elementary school principal, stated:

> I find it [reprimanding a teacher] very stressful but I don't find it as stressful as not doing it and having to live with slackness . . . .

The other principal, a composite high school principal, stated:

> When I have teachers who have been taking too long for coffee breaks day after day and I become aware of it, I immediately ask them to come to my office. We sit and chat, and I tell them that I'm disappointed and I don't want it to happen again . . . . that's stressful but it's probably not as stressful as letting them get away with it day after day.

Summary. Principals identified and described as very stressful the process of confronting or reprimanding a teacher in regard to behaviors considered by principals to be "inappropriate," "neglectful," or "unprofessional." However, two principals explained that even though it is stressful confronting or reprimanding a teacher it is probably more stressful having to tolerate the continuation of neglectful, inappropriate, or unprofessional behavior of a teacher. Several very stressful aspects of the process of confronting or reprimanding a teacher were identified. The actual confrontation time was described by one principal as very stressful because he disliked saying negative things to people and by another because she felt ashamed. The post-confrontation period was also identified as potentially very stressful because of the uncertain future relationship between the principal and teacher.

Student Discipline

Crowson and Porter-Gehrie (1981:28) report that:

> A key responsibility of every principal is the supervision of school decorum and disciplinary order. Styles, of course, vary. Some principals give much personal effort to the strict control of pupil behavior . . .; others are more willing to accept a bit of noise, confusion, and untidiness while nonetheless overseeing the maintenance of control.

Insights provided by nine of the principals interviewed in the study indicate that these principals find certain aspects of having to maintain the disciplinary stability of the school very stressful. In particular, these principals identified the following three aspects of maintaining disciplinary stability very stressful: (1) the initial confrontation of the principal with the student(s), (2) contending with student resentment and lack of respect, and (3) dealing with severely "out of control" children. Specific insights into these three aspects are examined within the following three sub-sections.

The initial confrontation.

When a relatively serious event has transpired and the suspect is summoned into the principal's office, the period of time until the facts and details are established was described as "frustrating," "tense," and "anger filled" by three principals. These principals explained that they experienced tension, frustration, and anger because the child was uncooperative, obstinate, or resentful. An elementary-junior high school principal provided the following illustration of a very stressful initial confrontation with a grade nine boy who had directed an obscenity at a teacher:

> When I asked him [the boy] why he told this teacher to . . . [obscenity deleted] he gave me the answer that this teacher deserved it. This boy made me very angry and I guess that it was a very stressful moment. The way I dealt with that was simply to

> say to the kid: I'm too angry to talk to you . . . you sit here . . . I'll be back in 10 minutes . . . . I walked away to calm down. There was a frustration point that I reached. I was attempting to reason with this kid and he was not listening. And, then there was some obstinacy and a smirk on the face, you know that look of -- you're a piece of whatever . . . . The kid that blows up I don't have any trouble with at all. There is a difference between blowing up and having it over and then sitting down and discussing it. And, then there's the kid who absolutely refuses to listen to anybody's reason . . . .

A composite high school principal provided the following description of the frustration he experienced as he confronted a student who had vandalized a school locker:

> I just dealt with a student who gave a locker a couple of karate kicks allegedly because it would not open. The locker door is now concave. When I told him that I would contact his parents to inform them that they would be getting a bill for vandalism he reacted as if the whole thing wasn't really his fault. He tried to convince me that he was only trying to open the locker because it was jammed. And, why should the parents pay?

Lack of respect. Disrespectful attitudes of students toward rules and people in authority were identified by a very experienced elementary-junior high school principal as the basis of much of the stress that he had experienced. This principal explained further that:

> I'm finding that my standards and expectations have not changed but apparently society has, and I have a very difficult time with that. The kinds of freedoms that students feel they can take -- what I regard as a lack of respect for authority, teachers, regulations, and rules . . . kids just blatantly ignore rules; they'll admit they know what the rules are but they ignore them. So I found last year to be very stressful and I think that the students saw working with me to be very stressful also.

Another elementary-junior high school principal provided the following additional insight:

> . . . it is very stressful for me when a student personally attacks me -- writing on washroom walls or whatever. I'm as sensitive to that as anybody else.

Out of control children. Three principals explained that dealing with "out of control" children is a very stressful aspect of maintaining the disciplinary stability of a school. Some notion of what is meant by an "out of control" student was provided by a junior high school principal when he said:

> We have one student who is totally out of control as far as his emotions or reactions when he is challenged in terms of his behavior. He becomes violent to the point where he has to be physically restrained . . . . We had an incident last year where he antagonized a teacher to the point where she hit him . . . three other staff members have reacted the same way.

Another junior high school principal explained that he found work-related situations that were beyond his control very stressful. He added that dealing with "out of control" pupils was very stressful for him because he felt powerless in dealing with such children. The problems of such children were beyond his ability to solve or control.

An elementary school principal provided the following insights into a very stressful situation that developed when an "out of control" boy was enrolled at his school:

> I had a hell of a situation a couple of years ago. I had a kid come into the school; he had been kicked out of the Separate System on a couple of occasions. He was obviously an emotionally disturbed boy and a lot of trouble . . . . This kid displayed all the problems that we knew he was going to show. The parents simply, particularly the father, would not accept the fact that there was something wrong with this boy and just simply put the blame on the school . . . . Finally, it was a matter of suspending the child, getting him back, and suspending him again . . . . The teacher was coping well, I thought, with the situation but it was still a very heavy strain on her. Then finally, I just told the associate [superintendent] that if nothing could be done about this I was going to expel the kid. Expulsion means, of course, that it has to go to the Board . . . then of course he [the associate superintendent] did something about it. He took the boy out of the school and put him on a home-bound program. I found that very stressful. You know -- prolonged stress, constant day-in and day-out kind of thing.

In conclusion it is clear that principals find dealing with severe student disciplinary matters very stressful. The initial confrontation of principal and student is stressful for principals if students are perceived by principals as uncooperative, resentful, or obstinate. Disrespectful attitudes of students towards rules, teachers, and others in authority were also identified by two principals as elements contributing to the stress that they experienced in maintaining the disciplinary stability of their schools.

Reducing Surplus Staff

Some of the principals in the study held principalships of schools located in relatively new neighborhoods of Edmonton -- for example Millwoods -- in which pupil enrollments were generally increasing. None of these principals identified situations or issues related to increasing pupil enrollments as a major source of stress. Most principals held principalships of schools in which pupil enrollments were relatively stable. Eight of the principals interviewed identified and described as very stressful the need to reduce the number of staff during periods of declining pupil enrollments. These were principals of schools located in well-established neighborhoods of Edmonton in which pupil enrollments were declining.

Very stressful aspects for principals of having to reduce surplus staff were identified as: (1) informing a member of staff that he/she would be declared surplus, (2) the pre-decision period, and (3) contending with undesired consequences of designating surplus staff based upon program considerations or lack of seniority of teachers. Specific insights into these very stressful aspects for principals of declaring surplus staff are examined within the following three subsections.

Informing a staff member that he/she would be declared surplus. A very stressful aspect for principals of the process of reducing the number of surplus teachers is having to inform a member of staff that he/she will be declared surplus. Principals revealed that teachers tend to take such news as a reflection on their teaching. One principal explained that sometimes there is a stigma of incompetence attached to somebody who has been declared surplus. Even though principals explain to teachers that declining enrollments have necessitated that the number of staff be reduced and that program considerations and seniority are the criteria used in the designation of surplus staff, some teachers interpret such news personally. Others have difficulty accepting why it has to be them in particular and not somebody else. Principals feel a strong commitment to staff and find it very stressful seeing teachers receive the news personally.

Insights into the very stressful aspect of having to inform a member of staff that he/she would be declared surplus were provided by a composite high school principal when he explained that:

> Coming up shortly we [the school] will be in a situation where I will have to identify some surplus staff. In the past I have found giving the word to someone who is surplus very stressful. I usually have the person in my office and I outline what has led to the situation as completely as I can. The atmosphere is always very tense at these times. What makes things worse is when people break down. Most people take it very personally . . . .

An elementary school principal expressed a similar point of view when he stated that:

> I find it is difficult to tell teachers they are surplus. I have never had a teacher who has accepted it really very gracefully and

> I can understand that.

A very experienced elementary school principal also explained that:

> . . . it's the strain of having to tell a person they are declared surplus and it doesn't make a damn bit of difference how you say: It is nothing to do with your teaching or anything like that, and so on like that. They take it as a personal thing. They want to know "why me?" For me it's extremely stressful. Maybe for some other principals it may be no stress at all -- they can tell people to get the hell out and no problem. I can't. That's where I find most of my stress.

An elementary-junior high school principal explained:

> I don't like making cuts or telling my staff that they will not be here for next year . . . . There was one person released last year. I was the one who told her she was going to be released. Though I did not make the decision fully on my own -- Central Office people did have a lot to do with it -- I felt that if she was working for me it was part of my responsibility to be able to tell her bad news as well as tell her good news. That was very stressful. I did not want to see her hurt and she was hurt even though it was pretty obvious that she was surplus.

Similar sentiments were expressed by a composite high school principal:

> We were overloaded with math and science teachers last year. All of these teachers are excellent . . . the stress for me is not wanting to hurt them . . . .

Finally, an elementary school principal commented that:

> I feel a deep commitment to the people who have served here . . . ; we work very well together and it's difficult to say: It looks like some of us are not going to be here next year. How do you get out of that gracefully?

The pre-decision period. This is the period extending from the time it is announced to the staff by the principal that somebody will probably be declared surplus until the decision is actually made. Principals inform staff of the likelihood that it will be necessary to declare some person(s) in surplus. This is done in the hope that somebody who desires a transfer will volunteer to become the person named in surplus. This strategy works successfully for some principals therefore relieving stress for the principal and teachers. An elementary school principal who had considerable success in encouraging staff to seek transfers outlined her strategy as follows:

> . . . fortunately by talking during the year over coffee and lunch I have been able to make the teachers realize what we were up against, so they have made the decision, I didn't. You have to do it cleverly -- throw out ideas that a change would be good for some of them . . . . I tell them that I have moved a lot and that I like change . . . so some of the staff decided for themselves that it was time for a change. Every year that the enrollment has dropped someone has offered to move. I started early this year to plant the idea . . . so that I wouldn't be put in the position of naming one person . . . . I try to look at the positive side that change is not bad . . . teachers should be encouraged to move.

However, it appears that this pre-decision period did not work as smoothly and easily for some other principals. For example, an elementary school principal explained:

> Two years ago I pre-warned the teachers that it looked like we were going to be in a surplus teacher situation and that I might have to declare somebody surplus. I was hoping that I would not have to but I might. Well, this fellow for some reason got it into his head that he was the guy and he came to me: "Well am I going to be the one?" And I said, "I don't know, maybe, the likelihood is that it will be you if there is a further decline in our numbers." He bugged me and bugged me and made remarks at staff meetings until the end of April. It was a very tense two months for all of us.

A composite high school principal who, at the time of the interview, had to declare one member of staff surplus also identified the pre-decision period as very stressful for the following reasons:

> We had a staff meeting and everyone is well aware of the situation [that pupil enrollments had declined] . . . . I requested volunteers but none of them was willing to go . . . . Two people have been named and I have to decide on one of them . . . . I find it very stressful because I cannot make a decision and I really want to make a decision and I have to decide soon. It's the frustration of not being able to decide that causes me stress.

Undesired consequences of applying the criteria for the designation of surplus staff. In deciding which members of staff will be declared surplus principals have to consider, among other criteria, program needs of the school and seniority of teachers. If a surplus of staff occurs in a particular subject area or at a grade level then the most junior member of staff in that subject area or grade level is to be declared surplus. An elementary school principal identified as very stressful the following situation which occurred when a teacher, who by most standards was quite senior, had to be declared surplus because she was the most junior teacher in a division of an elementary school:

> . . . the first consideration is the needs of your program and the second is seniority. Also, you have to make a selection on the basis of where the loss [decline in pupil enrollments] has taken place -- either in division one or two -- so it's not your total staff that you are looking at, it's teachers in grades 1 to 3 and teachers in grades 4 to 6. So I had to tell this teacher that she was surplus because of lack of seniority and this gal had been on staff for 13 years.

Two elementary school principals expressed frustration at having to declare surplus an excellent teacher because of a lack of seniority. One of these principals added that:

> . . . it bothers me when after getting a commitment from new staff members that I have to come back to them at the end of the year and explain that the ball game has changed and instead of three of you, I only need two . . . you can only go to the well so often. I don't want to lose these capable people . . . they are very supportive staff members.

A rather dramatic situation which occurred at an elementary-junior high school revealed that ambiguity existed in the application of the criteria -- program needs and seniority of teachers -- for designating a member of staff surplus. The principal explained that:

> We had to cut one staff member and I was asked [by Central Office] to identify who was going to be cut. I looked at my program and identified the person. And, it went as far as that

> person phoning Central Office saying that she was not the person to be cut because she had been here two years and there was a person junior to her on staff. So I was told by Personnel [Division] that I could not cut her and I had to cut someone else . . . we had to lose a very good staff member who was a real worker and she had had a great year with the kids. I was not backed up [by Central Office] and I found that extremely stressful.

Summary. Principals identified and described as very stressful the following aspects of the process of having to declare a member of staff surplus because of declining enrollments:

1. Informing the member of staff that he/she will be declared surplus. Principals explained that teachers tend to take such news personally. Other teachers have difficulty accepting why it has to be them rather than somebody else.

2. The pre-decision period. This is the period of time from when it is announced to the staff by the principal that somebody will probably be declared surplus until the decision is actually made. In those schools in which there were no volunteers for transfers this time period was described as tension filled. One principal also described this time as very stressful for her because of the frustration that she was experiencing in having to decide which one of two teachers was to be declared surplus.

3. Undesired consequences of applying the criteria for the designation of surplus staff. Program needs of the school and seniority of teachers are important criteria used to identify surplus staff. Sometimes undesired consequences follow the application of these criteria. A principal described as very stressful the occasion when he had to inform a relatively senior and long serving member of staff that she was surplus because of program considerations. Two principals

expressed frustration at having to declare surplus excellent teachers because they lacked seniority. Another principal described the stress that he experienced when he declared a teacher surplus on the basis of program needs but was over-ruled by Central Office personnel who applied the seniority criterion.

SUMMARY

Data, findings, and discussions in relation to the first objective of the study were presented in this chapter. This objective was to determine the extent to which principals experienced stress associated with work-related situations; to seek an estimate of the frequency of occurrence of specified work-related situations; and to develop as complete, holistic, and contextual portrayals as possible of work-related situations that were perceived as very or extremely stressful by a considerable proportion of principals in the study. Descriptive and exploratory analyses of quantitative questionnaire data and qualitative interview data were reported in this chapter.

The range in *individual* perceptions of stress of each of the 43 work-related situations listed in the questionnaire extended from "not stressful" to at least "very stressful." According to mean scores for stress of each work-related situation, principals reported *on average* most work-related situations as "mildly" to "moderately stressful." The four most stressful items describe situations in which principals have to deal with a teacher whose performance is unsatisfactory. However, these situations were reported to occur "rarely." The ten least stressful work-related situations involve the principal in tasks that are relatively routine, expected, and unambiguous.

A significant negative Pearson correlation coefficient computed between mean scores for "stress" and mean scores for "frequency of occurrence" of each work-related situation indicated that the more stressful work-related situations tend to occur less frequently. Conversely, the less stressful work-related situations tend to occur more frequently in the principalship. Only one work-related situation -- "Being too rushed to complete tasks to your satisfaction" -- was considered worthy of some concern because it has a mean score for "stress" -- 2.02 -- which corresponds to a "moderate" experience of stress on average for principals and it occurs on average about 1-3 times per month. Other work-related situations which occur more frequently than this source of stress have lower mean scores for "stress." Conversely, situations which have higher mean scores for "stress" than this situation occur much less frequently.

An exploratory factor analysis of principals' responses on the "stress" scale for each of the 43 work-related situations revealed three factors. These were labelled: Factor 1 -- "Role overload, conflict, and ambiguity," Factor 2 -- "Establishing consensus and gaining support," and Factor 3 -- "Interacting with personnel whose performance was unsatisfactory." Factor mean scores were computed for "stress" and "frequency of occurrence." Factors 1 and 2 have relatively low mean scores for "stress." Factor 3 was perceived by principals as the most stressful of the three factors. This factor has a mean score for "stress" which is close to a group perception of "moderately stressful"; however, the mean score for "frequency of occurrence" is relatively low -- 1.08 -- indicating that this factor occurs "rarely."

Relationships were explored between selected individual factors -- Type A behavior, experience of principals in their present schools, and experience in total of the principalship -- and principals' perceptions of stress as measured by the three work-related factors. The overall Type A behavior scores and the three factor scores of Type A behavior of principals were not associated with principals' perceptions of stress as measured by the three work-related factors. Principals who had served longer in their present schools tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory and in dealing with situations that involved role overload, conflict, and ambiguity. Furthermore, principals who had more years of experience in total in the principalship also tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory.

Twenty-one work-related situations were spontaneously identified as very or extremely stressful during interviews by principals. Descriptions and analyses of the following "foremost" sources of stress from the preliminary list of 21 work-related situations were presented in this chapter: (1) Recommending the termination of employment or transfer of a teacher, (2) Role overload, (3) Conflict management, (4) Parental demands and concerns, (5) Confronting or reprimanding personnel, (6) Student discipline, and (7) Reducing surplus staff. "Conflict management" included two sources of stress from the preliminary list of 21 work-related situations, namely: "Resolving parent-child-teacher conflicts and misunderstandings," and "Resolving conflicts and misunderstandings between staff." These sources of stress were considered "foremost" in principals' minds because each was spontaneously identified by 6 or more of the principals -- at least 15 percent of those interviewed -- as having been very or extremely stressful. All of these sources of stress, with the exception of "Reducing surplus staff," corresponded to "important" sources of stress identified by questionnaire. "Reducing surplus staff" was not identified as a source of stress by questionnaire because the questionnaire did not include an item about reducing the number of surplus staff during periods of enrollment decline.

CHAPTER 5

COPING BEHAVIORS AND EFFECTIVENESS

Descriptive and exploratory analyses of quantitative data gathered by questionnaires of coping behaviors used by principals to deal with work-related stress are presented in this chapter. The chapter is divided into three major sections each of which presents data, findings, and discussions in relation to the sub-problems of Problem Statement 2, which read:

> *To what extent do principals in the study group employ certain coping behaviors, and what are principals' assessments of the relative effectiveness of these coping behaviors?*

The frequency with which specified coping behaviors are used by principals and principals' assessments of the relative effectiveness of these coping behaviors are reported in the first section of the chapter. An exploratory factor analysis of coping behaviors is presented in section two. Relationships between selected individual characteristics of principals and the frequency with which principals use certain coping behaviors are explored in section three.

COPING BEHAVIORS

> *2.1. How frequently has each specified coping behavior been used by principals, and what are the assessments of the relative effectiveness of coping behaviors by principals who have used these coping behaviors?*

The term "specified coping behavior" refers to each of the 24 coping behavior items that were provided in Section D of the questionnaire. Principals were asked to report how frequently they used each coping behavior to deal with work-related stress. The response categories of the "frequency of use" scale, with assigned rating scores, were labelled: "never" (score 0), "rarely" (score 1), "about 1-3 times per year" (score 2), "about 1-3 times per month" (score 3), "about 1-3 times per week" (score 4), and "about 1-3 times per day" (score 5). In addition, principals were asked to report the degree of effectiveness of each coping behavior. The response categories of the "effectiveness" scale, with rating scores, were labelled: "not effective" (score 0), "slightly effective" (score 1), "moderately effective" (score 2), "very effective" (score 3), and "highly effective" (score 4). Instructions were given to principals to leave a blank response on the "effectiveness" scale for those coping behaviors which they had never used to deal with work-related stress.

Mean scores were computed for the "frequency of use" and "effectiveness" scales of each coping behavior by using the assigned category rating scores. These provided estimates of the relative frequency of use and perceived effectiveness of each coping behavior.

The percentage frequency distributions of responses by principals and mean scores for "frequency of use" and "effectiveness" of each coping behavior are presented in Table 5.1. It should be noted that the responses on the "effectiveness" scale of any particular item were only from principals who had used the coping behavior at least once to deal with work-related stress. For example, item 10 -- "Ignore stressful problems because most problems solve themselves in time" -- was used "rarely" by 56 percent of the respondents; "about 1-3 times per year" by 12 percent of the respondents, and "about 1-3 times per month" by 4 percent of the respondents. Twenty-eight percent

Table 5.1

Percentage Frequency Distribution of Responses and Mean Scores for
Frequency of Use and Effectiveness of Coping Behaviors

Coping Behaviors	Frequency of Use Percentage of Responses							Effectiveness Percentage of Responses					
	0	1	2	3	4	5		0	1	2	3	4	
	Never	Rarely	About 1-3 times/year	About 1-3 times/month	About 1-3 times/week	About 1-3 times/day	Frequency Means	Not Effective	Slightly Effective	Moderately Effective	Very Effective	Highly Effective	Effectiveness Means
1. Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	6	22	30	22	12	8	2.36	12	27	37	20	4	1.78
2. Seek additional information about the situation before making the decision.	0	0	6	30	56	8	3.66	0	4	12	62	22	3.02
3. Consider a range of plans, then choose among the options.	0	0	18	49	29	4	3.18	0	2	21	52	25	3.00
4. Make every effort to be polite and prevent confrontations.	4	2	20	34	26	14	3.18	4	17	28	32	19	2.45
5. Take a break, then come back to the problem later.	0	4	16	42	28	10	3.24	0	6	32	44	18	2.74
6. Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	30	42	10	8	6	4	1.30	11	16	26	26	21	2.32
7. Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	4	18	12	28	36	2	2.80	4	10	31	37	18	2.55
8. Make a concerted effort to enjoy yourself with some pleasurable activity after work.	0	2	6	30	54	8	3.60	2	2	16	42	38	3.12
9. Avoid discussing stressful problems with your family or friends.	6	23	17	23	23	8	2.58	20	21	22	23	14	1.89
10. Ignore stressful problems because most problems solve themselves in time.	28	56	12	4	0	0	0.92	59	24	12	3	2	0.66
11. Use relaxation techniques such as meditation, yoga, self-hypnosis and biofeedback.	82	12	4	2	0	0	0.26	37	19	19	13	12	1.44
12. Seek advice and support from your Associate Superintendent.	0	12	60	24	4	0	2.20	2	20	34	34	10	2.30
13. Seek advice and support from other principals.	0	8	48	40	4	0	2.40	0	10	32	50	8	2.56

Table 5.1 (continued)

Coping Behaviors	Frequency of Use Percentage of Responses 0 Never	1 Rarely	2 About 1-3 times/year	3 About 1-3 times/month	4 About 1-3 times/week	5 About 1-3 times/day	Frequency Means	Effectiveness Percentage of Responses 0 Not Effective	1 Slightly Effective	2 Moderately Effective	3 Very Effective	4 Highly Effective	Effectiveness Means
14. Seek advice and support from your assistant principal(s).	36	0	5	11	41	7	2.41	3	3	7	57	30	3.07
15. Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	0	18	51	25	6	0	2.18	0	20	45	29	6	2.20
16. Discuss stressful problems with your spouse or a friend.	4	22	16	44	8	6	2.48	6	23	29	27	15	2.21
17. Seek the participation of the whole staff in decision-making.	0	2	25	63	10	0	2.82	0	8	22	59	10	2.71
18. Delegate some of your less important but stressful responsibilities to trusted subordinates.	4	4	6	52	32	2	3.10	2	6	20	45	27	2.88
19. Delegate some of your more important but stressful responsibilities to trusted subordinates.	10	22	34	26	8	0	2.00	8	13	32	34	13	2.30
20. Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	10	46	32	12	0	0	1.46	21	32	32	11	4	1.45
21. Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	0	16	2	6	40	36	3.78	2	8	24	35	31	2.84
22. Participate in physical activities to reduce tension.	4	10	6	26	36	18	3.34	4	4	24	43	25	2.80
23. Tackle stressful situations immediately and directly to get the problems out of your mind as quickly as possible.	2	6	14	36	34	8	3.18	4	14	18	39	25	2.65
24. Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill.	22	36	30	10	2	0	1.34	14	26	24	31	5	1.86

of the principals reported that they "never" used this coping behavior. Assessments of the relative effectiveness of this coping behavior were sought from the 72 percent of principals who reported having used this coping behavior at least once. The remaining 28 percent of principals who had never used this coping behavior were instructed to leave a blank response on the "effectiveness" scale for this item. Hence, the percentage frequency distribution of responses and mean score for "effectiveness" of any particular item, shown in Table 5.1, are estimates of the effectiveness of that coping behavior by only those principals who had actually employed that coping behavior at least once.

Assessments by principals of the effectiveness of coping behaviors ranged from "slightly effective" to "highly effective" for six of the specified coping behaviors. For the remaining 18 coping behaviors it is clear that while some principals rated any one of these to be "not effective" there were other principals who rated the same coping behavior to be "highly effective." A further examination of the spread of responses to the "effectiveness" of most coping behaviors reveals that the larger percentage of principals were within two or three response categories of each other in their assessments of the effectiveness of each coping behavior. For example, assessments of the "effectiveness" of item 7 -- "Work harder and longer hours to clear the back-log of work to get on top of stressful work demands" -- ranged from "not effective" by 4 percent of respondents to "highly effective" by 18 percent of respondents. However, the larger proportion of respondents -- 68 percent -- rated item 7 as "moderately effective" or "very effective." A more striking illustration of this pattern in ratings by principals of the effectiveness of coping behaviors is observed for item 10 -- "Ignore stressful problems because most problems solve themselves in time." Ratings for the "effectiveness" of this coping behavior also ranged from "not effective" to "highly effective." However, the majority of principals -- 83 percent -- rated this coping behavior to be either "not effective" or "slightly effective."

Considerable variations in the frequency of use of most coping behaviors were reported by principals. A further examination of the spread in responses, shown in Table 5.1, to the "frequency of use" by principals for most coping behaviors reveals that the majority of principals were within two response categories of each other in their estimates of the frequency with which they use any particular coping behavior. For example, estimates of the "frequency of use" of item 7 -- "Work harder and longer hours to clear the back-log of work to get on top of stressful work demands" -- ranged from "never" by 4 percent of respondents to "about 1-3 times per day" by 2 percent of respondents. However, the majority of principals -- 64 percent -- use this coping behavior either "about 1-3 times per month" or "about 1-3 times per week."

Item 14 -- "Seek advice and support from your assistant principal(s)" -- appears to be the only exception to the above observation. While 52 percent of the principals reported that they seek the advice and support of their assistant principal(s) either "about 1-3 times per month" or "about 1-3 times per week" a considerable proportion -- 36 percent -- reported that they "never" seek advice and support from their assistant principal(s). This apparent inconsistency occurred simply because 18 principals -- 36 percent of the respondents -- held principalships of small schools that were designated "one-administrator" schools; hence, they did not have an assistant principal from whom they could seek advice and support.

Fifteen of the coping behaviors have mean scores for "effectiveness" which range from 2.00 to 3.00. A mean score of 2.00 corresponds to a group assessment of "moderately effective," and a mean score of 3.00 corresponds to a group assessment of "very effective." Three coping behaviors have mean scores for "effectiveness" which are slightly in excess of 3.00. These are: item 2 -- "Seek additional information about the situation before making the decision," item 14 -- "Seek advice and support from your assistant principal(s)," and item 8 -- "Make a concerted effort to enjoy yourself with some pleasurable activity after work." Item 10 -- "Ignore stressful problems because most problems solve themselves in time" -- was rated on average by the group as the least effective of all the specified coping behaviors.

The three most frequently used coping behaviors by the respondents on average are: item 21 -- "Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems," item 2 -- "Seek additional information about the situation before making the decision," and item 8 -- "Make a concerted effort to enjoy yourself with some pleasurable activity after work." The five coping behaviors used least frequently on average by the respondents are: item 11 -- "Use relaxation techniques such as meditation, yoga, self-hypnosis, and biofeedback," item 10 -- "Ignore stressful problems because most problems solve themselves in time," item 6 -- "Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work," item 24 -- "Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill," and item 20 -- "Use the school system's rules and procedures as a buffer against community, parental or other stressful problems."

Coping Behaviors in Rank Order of Effectiveness

2.2. What is the rank order of the specified coping behaviors from the most effective to least effective?

Coping behavior items which appeared in Section D of the questionnaire were arranged in rank order using the mean of the response category scores for "effectiveness" of each item. Each coping behavior is presented in Table 5.2 in rank order of effectiveness as assessed on average by those principals who had used the coping behavior. Also shown in Table 5.2 is the mean score for "frequency of use" of each coping behavior. This measure is an estimate of the relative frequency of use by principals of each coping behavior.

In view of the considerable variation in assessments by principals of the effectiveness of most coping behaviors, the mean scores for "effectiveness" of each item should be treated only as a general guide to the relative effectiveness of each coping behavior.

Five of the six least effective coping behaviors appear to describe behaviors which serve to avoid dealing directly with sources of stress. More specifically, principals rated as relatively low in effectiveness behaviors whereby the principal ignores stressful problems; uses the school system's rules and procedures to avoid stressful demands arising from community, parental, or other demands; makes quick decisions to save time and avoid preoccupation with any one

Table 5.2

Rank Order of Coping Behaviors According
to Effectiveness Mean Scores

Rank	Coping Behaviors	Frequency Mean	Effectiveness Mean
1	Make a concerted effort to enjoy yourself with some pleasurable activity after work.	3.60	3.12
2	Seek advice and support from your assistant principal(s).	2.41	3.07
3	Seek additional information about the situation before making the decision.	3.66	3.02
4	Consider a range of plans, then choose among the options.	3.18	3.00
5	Delegate some of your less important but stressful responsibilities to trusted subordinates.	3.10	2.88
6	Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	3.78	2.84
7	Participate in physical activities to reduce tension.	3.34	2.80
8	Take a break, then come back to the problem later.	3.24	2.74
9	Seek the participation of the whole staff in decision-making.	2.82	2.71
10	Tackle stressful problems immediately and directly to get the problem out of your mind as quickly as possible.	3.18	2.65
11	Seek advice and support from other principals.	2.40	2.56
12	Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	2.80	2.55
13	Make every effort to be polite and prevent confrontations.	3.18	2.45
14	Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	1.30	2.32
15	Seek advice and support from your Associate Superintendent.	2.20	2.30
16	Delegate some of your more important but stressful responsibilities to trusted subordinates.	2.00	2.30
17	Discuss stressful problems with your spouse or a friend.	2.48	2.21
18	Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	2.18	2.20
19	Avoid discussing stressful work problems with your family or friends.	2.58	1.89
20	Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill.	1.34	1.86
21	Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	2.36	1.78
22	Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	1.46	1.45
23	Use relaxation techniques such as meditation, yoga, self-hypnosis and biofeedback.	0.26	1.44
24	Ignore stressful problems because most problems solve themselves in time.	0.92	0.66

troublesome issue; and avoids discussing stressful problems with family or friends.

Item 11 -- "Use relaxation techniques such as meditation, yoga, self-hypnosis, and biofeedback" -- can be described as a "palliative" technique according to Lazarus' (1974) conceptual framework of coping styles. Such relaxation techniques serve to ". . . strengthen our defenses against the stress that we cannot avoid" (Paterson and Zingle, 1979:9). A high proportion of the principals in the study -- 82 percent -- reported that they "never" use relaxation techniques such as meditation, yoga, self-hypnosis, and biofeedback. Of those principals who use relaxation techniques most use such techniques "rarely." This suggests that principals are relatively unfamiliar with the application of relaxation techniques, hence the low overall assessment for the "effectiveness" of item 11.

Principals reported that making a concerted effort to enjoy themselves with some pleasurable activity after work is one of the most effective ways of coping with stress. This coping behavior is palliative in that it serves to divert attention from sources of work-related stress to pleasurable non-work-related activities to enhance personal capacities to endure future encounters with stressful work-related situations that cannot be avoided.

Principals also reported that they cope more effectively with potentially stressful situations when they consider a range of plans for dealing with the demands and then choose among the options. It appears also that principals consider advice, support, and information important elements in effective stress coping. More specifically, the following coping behaviors were considered very effective in general by principals: "Seek advice and support from your assistant principal(s)," and "Seek additional information about the situation before making the decision."

Coping behaviors that serve to prevent stressful situations from occurring were reported by principals to be more effective. For instance, by delegating some of the less important but stressful responsibilities to trusted subordinates a principal can reduce his/her work load and prevent a multitude of work-related demands from taking over his/her capacity to cope. Similarly, by patrolling the school and its grounds, principals can anticipate and prevent potentially stressful demands from developing. By participating in physical activities to reduce tension and by taking a break from working with a problem, principals engage in behavior that serves to prevent the build up of stress. Furthermore, item 17 -- "Seek the participation of the whole staff in decision-making" -- implies that rather than making unilateral decisions that may be unacceptable to staff members and hence create antagonism and stressful conflicts over these decisions, principals find it more effective to prevent or reduce the likelihood of such unacceptable decisions by seeking the participation of the whole staff in decision-making.

Frequency of Use and Effectiveness

> *2.3. What relationships exist between the frequency of use by principals of the specified coping behaviors and principals' assessments of the relative effectiveness of these coping behaviors?*

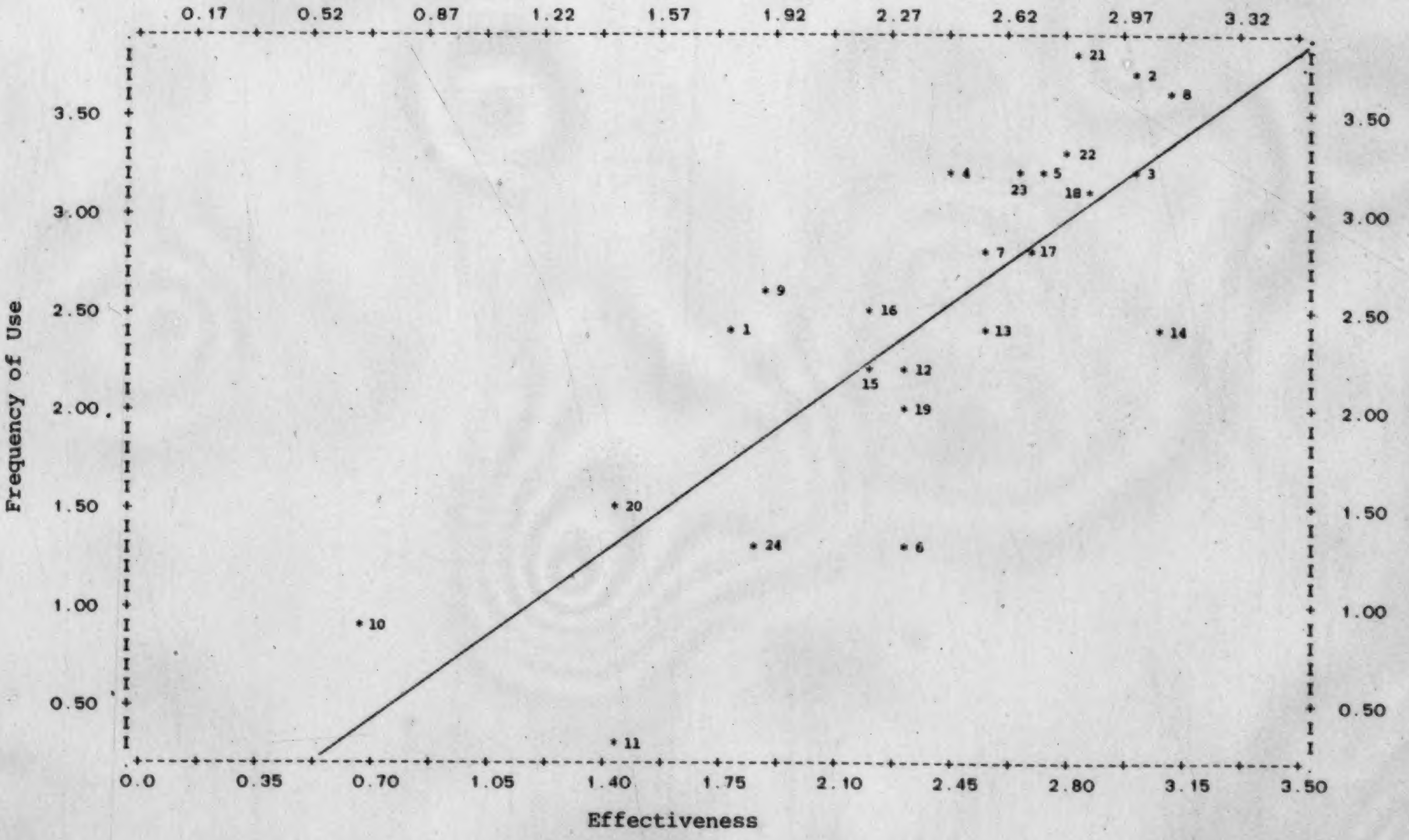
The Pearson correlation coefficient was computed between the set of mean scores for "effectiveness" of each coping behavior and the set of mean scores for "frequency of use" of corresponding coping behaviors. The Pearson correlation coefficient ($r = 0.816$) was significant at the level $p < 0.0001$. Hence, principals tend to use more frequently those coping behaviors which they found from previous experience to be more effective. This finding would be anticipated on rational grounds. It seems very unlikely that principals would continue to use a coping behavior that they found to be relatively ineffective. Conversely, it seems unlikely that principals would discontinue using a coping behavior that they found to be relatively effective.

Figure 5.1 is a scattergram of the mean scores for "frequency of use" of coping behaviors (plotted on the vertical axis) versus the mean scores for "effectiveness" of corresponding coping behaviors (plotted on the horizontal axis). The regression line is also shown on the scattergram. It intersects the vertical axis at a mean "frequency of use" score of 3.88 and the horizontal axis at a mean "effectiveness" score of 0.52.

The scattergram is presented because it facilitates easy recognition of coping behaviors that deviate considerably from the regression line. Items 6, 11, 14, and 21 deviate more from the regression line than other items. The only items that deviate from the regression line and are worthy of consideration are those that (1) are used frequently but were assessed by principals as less effective, or (2) are used less frequently but were assessed by principals as very effective. Item 6 -- "Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work" -- was assessed by principals on average as at least "moderately effective"; however, this coping behavior has a low "frequency of use" mean score -- 1.30 -- which corresponds to an average

Figure 5.1

Scattergram of Mean Scores for Frequency of Use versus Mean Scores for Effectiveness of Each Coping Behavior



frequency of use between "rarely" and "about 1-3 times per year." Item 14 -- "Seek advice and support from your assistant principal(s)" -- was assessed by principals on average as "very effective." The lower "frequency of use" mean score for this item was explained in the first section of this chapter as a consequence of the fact that 36 percent of the principals did not have an assistant principal from whom they could seek advice and support because they were principals of "one-administrator" schools. There were no coping behaviors identified which are used on average by principals "rarely" (frequency mean score of 1) and which were assessed on average as being "very effective" (effectiveness mean score of 3). In addition, there were no coping behaviors identified which are used on average more than "about 1-3 times per month" (frequency mean score greater than 3) and which were assessed on average as being "slightly effective" (effectiveness mean score of 1).

UNDERLYING DIMENSIONS IN THE COPING BEHAVIORS

> *2.4. What descriptive factors can be extracted from a factor analysis of principals' assessments of the relative effectiveness of each specified coping behavior?*

Principals' responses on the "effectiveness" scale for each of the 24 coping behaviors were factor analyzed using varimax rotation. The purpose of this analysis was to explore the data for underlying patterns of relationships so that the data could be described by a smaller set of factors. The first three factors (eigenvalues 5.43, 2.47, and 2.05 respectively) were selected for varimax rotation.[1] These three factors accounted for 41.5 percent of the variance. Factors 1, 2, and 3 accounted for 22.6 percent, 10.3 percent, and 8.6 percent respectively of the variance.

Items were considered to contribute to the meaning of a factor if they satisfied the following criteria:

1. Item loadings on a factor should be greater than or equal to 0.40.
2. Any item should load decisively on one factor only. Hence, if an item loaded above .40 on more than one factor it was not used for the purposes of factor interpretation.
3. Items included in a factor should contribute logically to the meaning of the factor.

Each coping behavior with its respective loadings on the three factors is presented in Table 5.3. Factor loadings greater than .40 are identified in Table 5.3. Items 11, 20, and 24 did not load above .40 on any of the three factors. Three coping behaviors -- items 8, 18, and 19 -- loaded above .40 on more than one factor. These items were not used for factor interpretation.

The three factors were labelled: Factor 1 -- "Task-oriented behaviors," Factor 2 -- "Preventive behaviors," and Factor 3 -- "Avoidance behaviors." The essential characteristics of these three

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[1] The criterion used for the selection of factors for rotation was the "Scree" or "Discontinuity test" (Harman, 1976). This method is based on the belief that once the last important factor has been extracted the eigenvalues will show a discontinuity.

Table 5.3

Varimax Factor Solution for 24 Coping
Behaviors Using Three Factors

Coping Behaviors	Factors and Factor Loadings 1 Task-Oriented Behaviors	 2 Preventive Behaviors	 3 Avoidance Behaviors
2. Seek additional information about the situation before making the decision.	.669	.186	-.040
23. Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible.	.573	.041	.249
16. Discuss stressful problems with your spouse or a friend.	.538	.127	-.149
15. Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	.507	.031	.160
7. Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	.501	.378	.090
3. Consider a range of plans, then choose among the options.	.464	-.083	-.058
4. Make every effort to be polite and prevent confrontations.	-.014	.553	.151
17. Seek the participation of the whole staff in decision-making.	.233	.552	.021
12. Seek advice and support from your Associate Superintendent.	-.002	.510	.210
21. Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	.327	.472	.092
13. Seek advice and support from other principals.	.365	.468	.026
5. Take a break, then come back to the problem later.	.343	.448	.191
6. Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	-.107	.410	.247
10. Ignore stressful problems because most problems solve themselves in time.	-.118	.188	.572
14. Seek advice and support from your assistant principal(s).	-.007	-.041	.533

Table 5.3 (continued)

Coping Behaviors	Factors and Factor Loadings 1 Task-Oriented Behaviors	2 Preventive Behaviors	3 Avoidance Behaviors
9. Avoid discussing stressful work problems with your family or friends.	.051	.152	$\boxed{.529}$
1. Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	.053	.094	$\boxed{.434}$
22. Participate in physical activities to reduce tension.	.229	.305	$\boxed{.408}$
8. Make a concerted effort to enjoy yourself with some pleasurable activity after work.	$\boxed{.622}$	$\boxed{.554}$	-.082
18. Delegate some of your less important but stressful responsibilities to trusted subordinates.	$\boxed{.589}$	.026	$\boxed{.419}$
19. Delegate some of your more important but stressful responsibilities to trusted subordinates.	$\boxed{.457}$	-.188	$\boxed{.462}$
11. Use relaxation techniques such as meditation, yoga, self-hypnosis and biofeedback.	.088	.252	.335
20. Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	-.045	.239	-.019
24. Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill.	.162	.376	.295
Eigenvalues	5.43	2.47	2.05
Percentage of total variance	22.6	10.3	8.6
Percentage of common variance	60.0	22.3	17.7

factors are described below.

Factor 1: Task-Oriented Behaviors

Items in this factor describe behaviors which serve to deal directly with stressful demands that have already arisen. In Lazarus' (1974) terms these can be described as direct-action coping behaviors. These coping behaviors serve to deal directly with the task at hand, to change its essential nature, and hence to overcome in time the stress associated with such demands. Furthermore, as part of the process of dealing directly with sources of stress, administrators find it more effective to seek additional information about the situation, to consider a range of plans, and to discuss problems with their spouses or friends before choosing among the options.

Factor 2: Preventive Behaviors

Items in this factor describe behaviors which serve to prevent stressful demands from arising. By patrolling the school and its grounds, by making every effort to be polite, and by seeking the participation of the whole staff in decision-making, it appears that principals attempt to prevent stressful situations from occurring. By taking a break or by setting aside a period of the day when they do not accept visitors, requests, or phone calls principals endeavor to prevent existing demands from overcoming their capacities to cope. It appears that principals seek advice and support from associate superintendents or other principals about strategies for preventing demands from becoming sources of excessive stress.

Factor 3: Avoidance Behaviors

Items in this factor describe behaviors which serve to avoid preoccupation with sources of stress. Preoccupation with stressful demands is avoided by ignoring stressful demands, by refraining from discussing work-related problems with family or friends, by making quick decisions, or by participating in physical activities.

Discussion

"Seeking social support" appears to underlie task-oriented, preventive, and avoidance behaviors. More specifically, item 16 -- "Discuss stressful problems with your spouse or a friend" -- loaded positively on Factor 1. Item 12 -- "Seek advice and support from your Associate Superintendent," and item 13 -- "Seek advice and support from other principals" -- loaded positively on Factor 2, and item 14 -- "Seek advice and support from your assistant principal(s)" -- loaded positively on Factor 3. This finding appears to be consistent with the writings of Kyriacou (1981:58) who maintains that "seeking social support" underlies a whole range of coping behaviors. According to Kyriacou (1981:58) social support provides individuals with the opportunity to receive advice from trusted colleagues about direct-action techniques. Furthermore, by discussing conflicts and problems which have grown out of proportion, individuals can develop a more realistic perspective of the situation. Social support also provides an outlet for tension that has developed.

Frequency of Use and Effectiveness of Factors Derived from the Factor Analysis

The following are listed in Table 5.4:

1. the item composition of each of the three factors,
2. the mean score for "effectiveness" of every item within each factor and the mean score for "effectiveness" of each factor, and
3. the mean score for "frequency of use" of every item within each factor and the mean score for "frequency of use" of each factor.

The mean score for "effectiveness" of a factor was computed by taking the average of the mean scores for "effectiveness" of all the items within the factor. Similarly, the mean score for "frequency of use" of a factor was computed by taking the average of every item mean score for "frequency of use" within the factor.

The mean score of principals' responses to "effectiveness" of the six items which comprise Factor 1 -- "Task-oriented behaviors" -- is 2.61. This mean score indicates that principals assessed this factor as "moderately" to "very effective." The factor mean score for "frequency of use" -- 2.91 -- indicates a frequency of "about 1-3 times per month."

The mean score of principals' responses to "effectiveness" of the seven items which comprise Factor 2 -- "Preventive behaviors" -- is 2.56; hence, principals assessed this factor as "moderately" to "very effective." The mean score for "frequency of use" -- 2.70 -- of Factor 2 indicates a frequency of "about 1-3 times per month."

Factor 3 -- "Avoidance behaviors" -- was assessed by principals as the least effective of the three factors. The mean score for "effectiveness" -- 2.04 -- corresponds to a group assessment of

Table 5.4

Summary of Factors Derived from the Factor Analysis and Factor Mean Scores for Effectiveness and Frequency

Factor	Coping Behaviors	Frequency Means	Effectiveness Means
1. Task-Oriented Behaviors	2. Seek additional information about the situation before making the decision.	3.66	3.02
	3. Consider a range of plans, then choose among the options.	3.18	3.00
	7. Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	2.80	2.55
	15. Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	2.18	2.20
	16. Discuss stressful problems with your spouse or a friend.	2.48	2.21
	23. Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible.	3.18	2.65
		$\bar{X}$(frequency) = 2.91	$\bar{X}$(effectiveness) = 2.61
2. Preventive Behaviors	4. Make every effort to be polite and prevent confrontations.	3.18	2.45
	5. Take a break, then come back to the problem later.	3.24	2.74
	6. Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	3.24	2.74
	12. Seek advice and support from your Associate Superintendent.	2.20	2.30
	13. Seek advice and support from other principals.	2.40	2.56
	17. Seek the participation of the whole staff in decision-making.	2.82	2.71
	21. Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	3.70	2.84
		$\bar{X}$(frequency) = 2.70	$\bar{X}$(effectiveness) = 2.56

Table 5.4 (continued)

Factor	Coping Behaviors	Frequency Means	Effectiveness Means
3. Avoidance Behaviors	1. Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	2.36	1.78
	9. Avoid discussing stressful work problems with your family or friends.	2.58	1.89
	10. Ignore stressful problems because most problems solve themselves in time.	0.92	0.66
	14. Seek advice and support from your assistant principal(s).	2.41	3.07
	22. Participate in physical activities to reduce tension.	3.34	2.80
		$\overline{X}$(frequency) = 2.32	$\overline{X}$(effectiveness) = 2.04

"moderately effective." The Factor 3 mean score for "frequency of use" -- 2.32 -- indicates that this factor is used on average "about 1-3 times per year."

COPING FACTORS AND INDIVIDUAL CHARACTERISTICS

> *2.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and the frequency of use by principals of coping behaviors on the other?*

It was observed in the first section of this chapter that considerable variations in the frequency of use of certain coping behaviors were reported by principals. Two individual characteristics -- Type A behavior and experience -- have been identified in the literature reviewed in Chapter 2 as factors which may be associated with the variation in the frequencies with which principals use certain coping behaviors. Hence, the associations between Type A behavior scores and experience of principals, and the frequency of use by principals of coping behaviors were explored.

In the previous section of this chapter it was reported that an exploratory factor analysis of the 24 coping behavior items provided in the questionnaire revealed three descriptive factors. These were labelled: Factor 1 -- "Task-oriented behaviors," Factor 2 -- "Preventive behaviors," and Factor 3 -- "Avoidance behaviors." Pearson correlation coefficients were computed between Type A behavior scores and experience of principals on the one hand and the frequency of use by principals of each of the three coping factors on the other. These correlation coefficients are presented in Table 5.5. Each of the four Type A behavior scores -- the overall measure of Type A behavior, Factor S (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-

Table 5.5

Pearson Correlation Coefficients of the Frequency of Use by Principals of Each Coping Factor and Selected Variables: Type A Behavior Scores and Experience of Principals

Coping Factors	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Total
1. Task-Oriented Behaviors	.085	.085	.271*	.287*	-.192
2. Preventive Behaviors	.141	.135	.368**	.127	-.296*
3. Avoidance Behaviors	.173	.259*	-.082	-.105	.173

* $p < .05$

** $p < .01$

Driving and Competitive) -- was described in Chapter 3 under the heading: "Measurement of the Type A behavior pattern." Overall Type A behavior scores of principals were reasonably normally distributed. Fifteen principals were predominantly Type A, 13 principals were predominantly Type B, and 22 principals had an approximately equal representation of Type A and Type B behavioral characteristics.

As shown in Table 5.5, the overall Type A behavior scores of principals were not associated with the frequency of use by principals of each of the three coping factors. Principals who scored higher on Factor S (Speed and Impatience) tended to use more frequently avoidance behaviors (Factor 3). Principals who scored higher on Factor J (Job Involvement) tended to use more frequently task-oriented behaviors (Factor 1) and preventive behaviors (Factor 2). Principals who were more hard-driving and competitive (Factor H) tended to use task-oriented behaviors (Factor 1) more frequently. More experienced principals tended to use preventive behaviors (Factor 2) less frequently.

A similar analysis to the above was also performed using each of the 24 coping behaviors instead of the three coping factors. This analysis is reported in Appendix D. The Pearson correlation coefficients between Type A behavior scores and experience of principals, and the frequency of use by principals of each of the 24 coping behaviors are presented in Table D.1. This analysis provided findings similar in general to those reported above. In addition it was found that principals with higher overall Type A behavior scores tended to use the following coping behaviors more frequently: "Make quick decisions to save time and avoid preoccupation with any one troublesome issue," "Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible," "Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems," and "Delegate some of your less important but stressful responsibilities to trusted subordinates."

Discussion

In the literature reviewed in Chapter 2 on Type A behavior it was suggested that the Type A behavior syndrome is a characteristic manner of responding to and coping with stressful situations. Furthermore, it was suggested in the literature that past experiences of coping with particular situations, whether successful or unsuccessful, would have some bearing on future preferences for particular coping behaviors for dealing with similar situations. The overall Type A behavior measure, factor scores of Type A behavior, and experience of principals account for relatively little of the variance in the frequency of use by principals of the three coping factors. Therefore, variations among principals in the frequency of use of coping factors are also associated with other variables and factors not investigated in the study.

SUMMARY

Data, findings, and discussions in relation to the second objective of the study were presented in this chapter. This objective was to determine the extent to which principals use certain coping behaviors to deal with work-related stress and to seek assessments from principals of the relative effectiveness of coping behaviors which they had employed. Descriptive and exploratory analyses of quantitative questionnaire data were reported in this chapter.

Assessments by principals of the effectiveness of 18 coping behaviors listed in the questionnaire ranged from "not effective" to "highly effective." For the remaining six specified coping behaviors assessments ranged from "slightly effective" to "highly effective." Considerable variations in the frequency of use of most coping behaviors were also reported by principals. However, a further examination of the spread in responses revealed that the majority of principals were within two response categories of each other in their estimates of the frequency with which they used any particular coping behavior.

Principals reported that making a concerted effort to enjoy themselves with some pleasurable activity after work is one of the most effective ways of coping with stress. Furthermore, principals assessed on average as "very effective" the following coping behaviors: "Seek advice and support from your assistant principal(s)," "Seek additional information about the situation before making the decision," and "Consider a range of plans, then choose among the options." Five of the six least effective behaviors were identified as avoidance behaviors. A significant positive Pearson correlation coefficient computed between mean scores for "effectiveness" and mean scores for "frequency of use" of each coping behavior confirmed what common sense would have predicted, namely that there is a tendency for principals to use more frequently coping behaviors that are assessed as more effective.

An exploratory factor analysis of principals' responses on the "effectiveness" scale for each of the 24 coping behavior items in the questionnaire revealed three factors. These were labelled: Factor 1 --

"Task-oriented behaviors," Factor 2 -- "Preventive behaviors," and Factor 3 -- "Avoidance behaviors." Factor mean scores were computed for "effectiveness" and "frequency of use." Factor 3 was assessed by principals as the least effective of the three factors. The mean score for "effectiveness" of Factor 3 -- 2.04 -- corresponds to a group assessment of "moderately effective." The mean score for "frequency of use" of Factor 3 -- 2.32 -- is the lowest of the three factors indicating that this factor is used on average "about 1-3 times per year."

Relationships were explored between the frequency of use by principals of coping factors and selected variables: Type A behavior and experience in total of the principalship. The overall Type A behavior measure, factor scores of Type A behavior, and experience of principals accounted for relatively little of the variance in the frequency of use by principals of the specified coping behaviors.

CHAPTER 6

OVERALL WORK-RELATED STRESS AND ASSOCIATED FACTORS

It was revealed in the review of literature and in Kyriacou and Sutcliffe's (1978a) model of stress that an individual's experience of overall work-related stress is associated to some degree with the following:

1. The extent to which the individual experiences stress associated with certain work-related situations and the frequency with which these situations occur;
2. The extent to which the individual successfully employs coping behaviors;
3. Individual factors; and
4. Contextual factors.

Descriptive and exploratory analyses of data gathered by interviews and questionnaires on factors associated with principals' experiences of overall work-related stress are presented in this chapter. The chapter is divided into seven major sections each of which presents data, findings, and discussions in relation to one of the sub-problems of Problem Statement 3, which read:

> *What factors are associated with principals' experiences of overall work-related stress?*

In the first section of the chapter, principals' perceptions of overall work-related stress are reported. Work-related situations which are predictors of overall work-related stress of principals are reported in section two. Similarly, coping behaviors which are predictors of overall work-related stress of principals are reported in section three. Associations between individual and contextual factors and principals' perceptions of overall work-related stress are explored in section four. Individual and contextual factors identified by principals during interviews as having either reduced or contributed to their experiences of overall work-related stress are described and analyzed respectively in sections five and six. Descriptions and analyses of Edmonton Public School System factors identified by principals during interviews as either reducing or contributing to their experiences of overall work-related stress are presented in the final section of the chapter.

OVERALL WORK-RELATED STRESS

3.1. To what extent do principals experience work-related stress?

Principals' perceptions of overall work-related stress were measured by one item which appeared in Section B of the questionnaire. Principals were asked to respond to the question: "In general, how stressful do you find the role of principal?" The response categories were labelled: "not stressful," "mildly stressful," "moderately stressful," "very stressful," and "extremely stressful."

The frequency and percentage frequency distributions of responses by principals on the measure of overall work-related stress are presented in Table 6.1. A large proportion of principals -- 58 percent -- perceived the role of principal as "moderately stressful." Only 8 percent of the respondents reported the role of principal as "very stressful," and none of the respondents reported the role of principal as "extremely stressful." A small proportion of principals -- 4 percent -- perceived the role of principal as "not stressful."

Table 6.1

Frequency and Percentage Frequency Distributions of Responses on the Measure of Overall Work-Related Stress

Overall Work-Related Stress	Frequency (N = 50)	Percentage Frequency
Not Stressful	2	4
Mildly Stressful	15	30
Moderately Stressful	29	58
Very Stressful	4	8
Extremely Stressful	0	0

Clearly, the greatest proportion of principals -- 88 percent -- reported the role of principal as either "mildly" or "moderately stressful."

Discussion

Selye (1974) argued that some stress is both necessary and desirable for the efficient and effective performance of an individual. Three principals who reported the role of principal as "mildly stressful" and five principals who reported the role of principal as "moderately stressful" provided unsolicited comments during the semi-structured interviews to the extent that they seek a "certain" level of stress in their work and that stress is not necessarily something to be avoided. It appears that principals who report the role of principal as either "mildly" or "moderately stressful" are experiencing on average, in Selye's (1974) terms, a necessary, desirable, and reasonable level of stress. Comments were neither solicited from, nor provided by, the other 28 principals interviewed regarding this proposition.

Some of the eight principals who *spontaneously* provided comments in support of the above proposition stated that they seek "challenge" in their work; others enjoy "tension," while some commented that they thrive on "pressure." The importance of some stress in the principalship was highlighted by an elementary school principal who stated that:

> There's a certain amount of stress associated with the job that you kind of expect. I think it's important that there be a little bit of stress each day because it does something for you -- picks you up and keeps you going and makes you concentrate . . . . When things are really busy, really hectic, but they are going well, I enjoy that . . . . I like the involvement in the activity . . . even though you don't have the time to take a deep breath it's rewarding . . . .

Another elementary school principal who rated the role of principal as "moderately stressful" explained:

> I function much better when there is a certain amount of pressure . . . when things become placid then I become lazy. I like a little bit of tension.

A composite high school principal who rated the role of principal as "mildly stressful" stated that, "Looking at the principalship, I don't find it stressful, I find it challenging . . . ." In addition, this principal explained that the role of principal of a large composite high school involves:

> . . . lots of pressure, but I don't find that stressful, I find that exhilarating. If that pressure wasn't there I would find it stressful because I would be bored stiff, . . . I don't watch the time and the day goes quickly and I'm happy, . . . I thrive on pressure; I enjoy pressure . . . .

From the comments of the above three principals it is apparent that they accept and even thrive on a "certain" level of pressure and tension that is associated with the role of principal. The other five principals also spontaneously explained that they seek a "certain" level of pressure and tension that is associated with the role of principal. The other five principals also spontaneously explained that they seek a "certain" level of challenge in the principalship. For example, the founding principal of a new school stated that for him the appointment ". . . was the ultimate challenge." The most challenging aspects of the appointment included supervising the architectural design of the new school, selecting the entire staff, and establishing a new school climate. In conclusion the principal added that he found the responsibilities of establishing a new school ". . . very exciting and challenging, moderately stressful, but exciting and challenging." An elementary-junior high school principal expressed similar sentiments when he explained that:

> Building a timetable I find moderately stressful, . . . it becomes very stressful when you are trying all the combinations for hours and it doesn't seem to work out. But it's not usually a serious type of stress, it's a challenging type . . . .

From the above comments by principals it appears that a mild to moderate level of stress may be that desirable level of stress which accompanies work of the principalship. To the extent that a self-report measure of stress can be considered an accurate measure of stress in the principalship, the results of the study reveal that only 8 percent of the principals were experiencing a high level of work-related stress. The majority of principals -- 88 percent -- who reported the role of principal as either "mildly" or "moderately stressful" were experiencing on average, in Selye's (1974) terms, a necessary and desirable level of stress.

WORK-RELATED SITUATIONS: PREDICTORS OF OVERALL WORK-RELATED STRESS

3.2. Which of the work-related situations are the best predictors of principals' perceptions of overall work-related stress?

The purpose of this section of the chapter is to determine the extent to which work-related situations in combination account for the variance in principals' perceptions of overall work-related stress. The approach adopted was stepwise multiple regression analysis. A summary of the regression analysis for the most important set of predictor variables of the variance in overall work-related stress is provided in Table 6.2. Thirteen work-related situations entered the regression equation which has an overall F ratio of 6.753 significant at the level of $p < 0.0001$. Only predictors for which the change in R^2 is at least 0.01 were included. Changes of less that 0.01 in R^2, though statistically significant, were considered so small to be of little

Table 6.2

Summary of the Regression Analysis for Work-Related Situations as Predictors of Overall Work-Related Stress

Work-Related Situations: Predictors in Order of Entry to the Regression Analysis[a]	Multiple R	R^2	R^2 Change	Simple R	Beta
4. Resolving parent-teacher conflicts and misunderstandings.	0.506	0.256	0.256	0.506	0.383
22. Being too rushed to complete tasks to your satisfaction.	0.609	0.371	0.115	0.476	1.688
6. Resolving interpersonal conflicts among staff.	0.650	0.423	0.052	0.387	1.471
16. Dealing with student vandalism of school property.	0.741	0.550	0.127	0.136	0.032
41. Experiencing interpersonal conflict with your Associate Superintendent.	0.764	0.584	0.034	0.132	0.091
25. Projecting staffing needs.	0.778	0.605	0.021	0.167	-0.150
14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	0.786	0.617	0.012	0.245	-0.076
23. Resolving the time demands of the principalship with the time demands of your family.	0.794	0.631	0.014	0.371	0.720
11. Presenting a teacher with a formal report on his/her unsatisfactory performance.	0.803	0.645	0.014	0.251	-0.630
34. Making decisions about issues over which there are no clear school district policy guidelines.	0.817	0.667	0.022	0.276	-1.094
31. Being criticized by parents or teachers for some of your administrative decisions.	0.823	0.677	0.010	0.167	-0.666
19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	0.831	0.690	0.013	0.268	-0.929
24. Contending with time pressures to complete the budget by the required date.	0.842	0.709	0.019	0.414	1.034

F ratio = 6.753 $p < 0.0001$

[a] Only includes predictors for which R^2 change was at least 0.010.

practical significance. The multiple R for the 13 predictors is 0.842; these account for 70.9 percent of the variance in overall work-related stress.

The best predictor of overall work-related stress, as shown in Table 6.2, is item 4 -- "Resolving parent-teacher conflicts and misunderstandings." This item is associated with 25.6 percent of the variance in overall work-related stress. Item 4 in combination with the two next best predictors -- "Being too rushed to complete tasks to your satisfaction" and "Resolving interpersonal conflicts among staff" -- account for 42.3 percent of the variance in overall work-related stress.

COPING BEHAVIORS: PREDICTORS OF OVERALL WORK-RELATED STRESS

3.3. Which of the coping behaviors used by principals are the best predictors of principals' perceptions of overall work-related stress?

The purpose of this section of the chapter is to determine the extent to which coping behaviors used by principals in combination account for the variance in principals' perceptions of overall work-related stress. The approach adopted was stepwise multiple regression analysis. A summary of the regression analysis for the most important set of predictor variables of the variance in overall work-related stress is provided in Table 6.3. Ten coping behaviors entered the regression equation which has an overall F ratio of 7.177 significant at the level of $p < 0.0001$. Only predictors for which the change in R^2 is at least 0.01 were included. Changes of less than 0.01 in R^2, though statistically significant, were considered so small to be of little practical significance. The multiple R for the 10 predictors is 0.805; these account for 64.8 percent of the variance in overall work-related

Table 6.3

Summary of the Regression Analysis for Coping Behaviors as Predictors of Overall Work-Related Stress

Coping Behaviors: Predictors in Order of Entry to the Regression Analysis[a]	Multiple R	R^2	R^2 Change	Simple R	Beta
20. Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	0.392	0.153	0.153	0.392	0.718
9. Avoid discussing stressful work problems with your family or friends.	0.560	0.313	0.160	0.225	0.417
3. Consider a range of plans, then choose among the options.	0.641	0.411	0.090	-0.309	-0.165
5. Take a break, then come back to the problem later.	0.687	0.472	0.061	0.264	0.565
23. Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible.	0.745	0.556	0.084	-0.145	-0.135
8. Make a concerted effort to enjoy yourself with some pleasurable activity after work.	0.773	0.597	0.041	-0.261	-0.079
14. Seek advice and support from your assistant principal(s).	0.780	0.608	0.011	0.058	-0.326
16. Discuss stressful problems with your spouse or a friend.	0.786	0.619	0.011	-0.045	-0.375
19. Delegate some of your more important but stressful responsibilities to trusted subordinates.	0.797	0.636	0.017	0.054	-0.346
12. Seek advice and support from your Associate Superintendent.	0.805	0.648	0.012	-0.086	-0.155

F ratio = 7.177 $p < 0.0001$

[a] Only includes predictors for which R^2 change was at least 0.010

stress.

The best predictor of overall work-related stress is item 20 -- "Use the school system's rules and procedures as a buffer against community, parental or other stressful problems." This coping behavior is associated with 15.3 percent of the variance in overall work-related stress. Item 20 in combination with the two next best predictors -- "Avoid discussing stressful work problems with your family or friends" and "Consider a range of plans, then choose among the options" -- account for 41.1 percent of the variance in overall work-related stress.

An inspection of the Beta weights in Table 6.3 reveals that when the effects of the other predictors are held constant, principals' perceptions of overall work-related stress tend to be:

1. higher, if principals tend to use the school system's rules and procedures as a buffer against community, parental or other stressful problems;
2. higher, if principals tend to avoid discussing stressful work problems with their family or friends;
3. lower, if principals tend to consider a range of plans and then choose among the options;
4. higher, if principals tend to take breaks and then come back to the problem later;
5. lower, if principals tend to tackle stressful situations immediately and directly to resolve the problem as quickly as possible;
6. lower, if principals tend to make a concerted effort to enjoy themselves with some pleasurable activity after work;
7. lower, if principals tend to seek advice and support from their

assistant principal(s).

8. lower, if principals tend to discuss stressful problems with their spouse or friends;
9. lower, if principals tend to delegate some of their more important but stressful responsibilities to trusted subordinates; and
10. lower, if principals tend to seek advice and support from their associate superintendent.

INDIVIDUAL AND CONTEXTUAL FACTORS AND OVERALL WORK-RELATED STRESS

3.4. To what extent are differences in principals' perceptions of overall work-related stress associated with:
Individual factors: Type A behavior, Factor S (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-Driving and Competitive)?
Structural factors: type of school and size of school?
Professional factors: experience in present school and experience in total?
Contextual factors: staff cohesiveness and level of staff support for the principal?

Individual Factors

The Jenkins Activity Survey Instrument was used in Section E of the questionnaire to obtain four scores on Type A behavior of principals. These were: an overall score for Type A behavior and scores for Factor S (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-Driving and Competitive). Descriptions of the characteristics of the three factor scores of Type A behavior were provided in Chapter 3 under the heading: "Measurement of the Type A behavior pattern."

Pearson correlation coefficients were computed between the four Type A behavior scores and principals' responses on the measure of overall work-related stress. None of these correlation coefficients was statistically significant.

A one-way analysis of variance of mean scores for overall work-related stress among principals classified according to their Type A behavior scores was also performed. Principals were grouped as either Type A1, Type A2, Type X, Type B3, or Type B4 by comparing their overall Type A behavior scores obtained from the Jenkins Activity Survey Instrument with normative data provided in the Jenkins Activity Survey Manual (Jenkins et al., 1979). Five principals were classified as Type A1, ten principals were Type A2, twenty-two were Type X, eight were Type B3, and five were Type B4. Analysis of variance revealed that no statistically significant differences existed between the mean scores for overall work-related stress of principals grouped as either Type A1, Type A2, Type X, Type B3, or Type B4.

Structural Factors

Data were sought in Section A of the questionnaire in relation to two structural characteristics of principals' schools. These were: the type of school (recorded as either "elementary," "elementary-junior high," "junior high," or "composite high"), and the size of the school (measured as the number of enrolled students). The objective of this section of the study was to determine whether principals' perceptions of overall work-related stress were associated with the type or size of principals' schools.

Type of school. The results of a one-way analysis of variance of mean scores for overall work-related stress among principals classified according to the grade structure of their schools are presented in Table 6.4. The F ratio of 2.895 significant at the level

Table 6.4

One-Way Analysis of Variance of Mean Scores for Overall Work-Related Stress among Principals Classified According to the Grade Organization of Their Schools

Type of School	N	Stress Mean	Standard Deviation	F Ratio	Probability
Elementary	32	2.656	0.653	2.895	0.045
Elementary-Junior High	6	2.833	0.753		
Junior High	8	3.125[a]	0.354		
Composite High	4	2.000[a]	0.817		

[a] The Scheffé procedure revealed that the mean for overall work-related stress of junior high school principals is higher than the mean for overall work-related stress of composite high school principals

$p < 0.05$ indicates that at least one difference among the means was statistically significant. The Scheffé procedure revealed that the mean score for overall work-related stress of junior high school principals was significantly higher than the mean score for overall work-related stress of composite high school principals.

Size of school. A Pearson correlation coefficient was computed between the size of principals' schools and principals' perceptions of overall work-related stress. The correlation coefficient ($r = -0.219$) was not statistically significant.

A one-way analysis of variance of mean scores for overall work-related stress among principals classified according to the size of their school was also performed. Four groups were formed: Group One included 11 principals of schools with pupil enrollments fewer than or equal to 200; Group Two included 12 principals of schools with pupil enrollments greater than 200 and fewer than or equal to 300; Group Three included 12 principals of schools with pupil enrollments greater than 300 and fewer than or equal to 400; and Group Four included 15 principals of schools with pupil enrollments greater than 400. Analysis of variance revealed that no statistically significant differences existed between the mean scores for overall work-related stress of principals classified into the above four groups according to the size of their schools.

Professional Factors

Data were sought in Section A of the questionnaire in relation to two professional factors. These were: the experience of principals in their present schools (measured as the number of years that each respondent had served as principal in his/her present school), and the total experience of principals (measured as the total number of years of experience that each respondent had as a principal). The objective of this section of the study was to determine whether principals' perceptions of overall work-related stress were associated with their experience as principals.

Experience in present school. A one-way analysis of variance of mean scores for overall work-related stress among principals classified according to the number of years of experience in their present schools was performed. Four groups were formed: Group One included 16 principals with one year of experience in their present schools; Group Two included 15 principals with two years of experience in their present schools; Group Three included seven principals with three or four years of experience in their present schools; and Group Four included 12 principals with five years or more of experience in their present schools. Analysis of variance revealed that no statistically significant differences existed between the mean scores for overall work-related stress of respondents classified into the above four groups according to their experience as principals in their present schools.

Experience in total. A one-way analysis of variance of mean scores for overall work-related stress among principals classified according to the total number of years of experience that they had as principal was performed. Five groups were formed: Group One included seven principals with one year of experience as a principal; Group Two included 10 principals with two or three years experience; Group Three included 10 principals with four, five, or six years experience; Group Four included 13 principals with seven, eight, nine, or ten years experience; and Group Five included 10 principals with more than 10 years experience in the principalship. Analysis of variance revealed that no statistically significant differences existed between the mean scores for overall work-related stress of principals classified into the above five groups according to the total number of years of experience that they had in the principalship.

Contextual Factors

Data were sought in Section A of the questionnaire in relation to two contextual factors. These were: the level of staff cohesiveness as a work group (assessed by principals as either "low," "below average," "average," "above average," or "high"), and the level of staff support for the principal (assessed by principals as either "low," "below average," "average," "above average," or "high"). The objective of this section of the study was to determine whether principals' experiences of overall work-related stress were associated with their perceptions of the level of staff support for them and the degree to which their staffs were cohesive as work groups.

Level of staff cohesiveness. A Pearson correlation coefficient was computed between the measure of staff cohesiveness and principals' perceptions of overall work-related stress. The correlation coefficient ($r = -0.153$) was not statistically significant.

A one-way analysis of variance was performed of mean scores for overall work-related stress among principals grouped according to their assessments of how cohesive their staffs were as work groups. The analysis of variance revealed that no significant differences existed between the mean scores for overall work-related stress of principals grouped according to the level of cohesiveness of their staffs.

Level of staff support. A Pearson correlation coefficient was computed between the measure of staff support for the principal and principals' perceptions of overall work-related stress. The correlation coefficient ($r = -0.203$) was not statistically significant.

A one-way analysis of variance was performed of mean scores for overall work-related stress among principals grouped according to their assessments of the level of support that they could rely upon from their staffs. The analysis of variance revealed that no significant differences existed between the mean scores for overall work-related stress of principals grouped according to the level of staff support.

FACTORS IDENTIFIED BY PRINCIPALS AS HAVING REDUCED OVERALL WORK-RELATED STRESS

> *3.5. What individual and contextual factors are identified by principals as having reduced their experiences of overall work-related stress?*

A semi-structured interview schedule (shown in Appendix B) was used to provide principals with the opportunity to identify and describe aspects of their schools, their administrative styles, or any other factors that reduced their experiences of overall work-related stress. *A priori* analysis categories were not employed; rather the interview data were explored with the purpose of developing analysis categories directly from the data. The analysis categories which emerged from the data were explored further with the purpose of gaining as complete, holistic, and contextual portrayals as possible of factors which reduce principals' experiences of overall work-related stress. Content analyses of the 36 interview transcripts revealed five categories of factors which principals identified as having reduced their experiences of overall work-related stress. Most of these categories contain a number of sub-categories. The five factors which emerged from the data were labelled:

1. Sources of support,
2. Relationships with staff,
3. Open communication and participation in decision-making,
4. Personal factors, and
5. School and contextual factors.

Principals' descriptions of each of these five factors and sub-categories of these factors are examined in the following five sections of the chapter. Only "salient" sub-categories of each of the five major factors are reported. A sub-category of a major factor was considered "salient" if it was identified spontaneously by 3 or more principals -- at least 8 percent of those interviewed.

Sources of Support

Principals identified several sources of support as having reduced their experiences of overall work-related stress. These were described by principals as: dedicated, cohesive, and highly supportive staffs; capable and supportive assistant principals; other principal colleagues; spouses; and highly supportive associate superintendents. Five major benefits were identified by principals as having accrued from the support of these individuals and groups.

First, dedicated, cohesive, and highly supportive staffs including capable and supportive assistant principals provide principals with some assurance that their schools will function reasonably effectively. The following illustration was provided by a junior-high school principal:

> I have surrounded myself with the kind of people who are very competent. I'm not only talking about the teaching staff . . . but my support staff -- secretarial and caretaking staff -- who are all totally self-starting people and highly supportive. I don't have a worry in the world when it comes to things being done. That's a lot of stress that's gone.

Second, various sources of support provide principals with the opportunity to share ideas and problems, and to receive advice about direct-action techniques for dealing with particular sources of stress. The following further explanation was provided by an elementary school principal:

> I think the key is support and it's reciprocal support from parents, students, teachers, colleagues and associates [superintendents] that I can phone. If I have a problem, I bounce if off them. I have staff members whom I count on to think rationally under pressure and come up with alternative ways of handling problems.

Other principal colleagues were identified by eight of the principals interviewed as important sources of advice and support regarding direct-action techniques for dealing with stress. A junior-high school principal provided the following comment:

> I find the easiest way to alleviate stress is through feedback. I have enough friends that do the job that I do that I check with them and touch base. I can see someone sitting in this job in a vacuum not checking with colleagues and driving themselves crazy . . . . I like to be able to bounce my ideas off other principals.

An elementary school principal expressed the following similar point of view:

> I seek advice and support from other principals fairly frequently because it's comforting for us. We are in the same boat. We understand each other's problems. It's important to keep in touch

and help solve one another's problems.

Third, by discussing problems and difficulties which develop out of proportion with the sources of support identified earlier, principals can establish a more "appropriate" perspective of these situations. An elementary school principal explained:

> I have a very close colleague in the Millwoods area; we are both principals and share many similarities . . . we have a lot of respect for each other and we are very good friends. We talk often and help each other put problems into their proper perspective.

Another elementary school principal commented:

> When I opened a new school . . . things eventuated that made me wonder whether it was worth the extreme stress . . . . I had someone to talk to and support me . . . my wife brought me around to look at the positive rather than negative side of things.

Fourth, by seeking information from supportive colleagues and associate superintendents, principals develop renewed confidence that their decisions are appropriate and supported. An elementary school principal explained:

> I'll call other principals and just ask, what are you doing about this situation? It may be fairly large questions like organizing the budget. Sometimes just getting an idea of what they are doing helps you out. You can hang up the phone and think -- well, he is all wet; I think he is going about this entirely the wrong way. All of a sudden you get renewed confidence in your own decision. You may feel he's going the right way and then maybe you should change your way of thinking.

Another elementary school principal highlighted the importance of information from sources of support in providing assurances that his decisions were appropriate:

> I talk with my previous principal and seek advice from my associate [superintendent]. My main purpose is to get as much information about the situation before I make the final decision. That gives me a kind of moral support.

Finally, principals explained that social interactions with colleagues offer an important means of relieving tension. By expressing feelings of anger and frustration to colleagues, principals can "get things off their chests" and develop an understanding that their problems are shared by others. An elementary-junior high school principal provided the following insight:

> . . . a good thing that we have got going now is that there is a group of principals that meet every second Friday after work and we sit down and get rid of some of the crap that has gone on in the last two week period . . . we rant and rave, and share our problems. We finish up laughing about each other's concerns . . . it's been a great way to get things off our chests.

Relationships with Staff

Sixteen principals identified mutually supportive relationships that they had developed with their staffs as reducing their experiences of overall work-related stress. Principals develop positive work relationships with staff, in part, by recognizing the achievements of individual members of staff and by supporting staff with their personal or professional needs. Furthermore, when relationships between principals and their staffs are mutually supportive and principals perceive members of staff as competent, principals tend to express confidence in being able to delegate some of their stressful duties to members of staff. Additional insights provided by principals into the nature of relationships between principals and staffs which reduce principals' experiences of overall work-related stress are examined in the following four sub-sections.

Mutual support. In the preceding section of the chapter it was reported that staff support for the principal was identified as a factor contributing to the reduction of some principals' experiences of overall work-related stress. To maintain the support of staff, principals explained that they support staff with their personal and professional needs. An elementary school principal stated, "I support the staff and they support me right to the end." Another elementary school principal provided the following additional insights:

> . . . we [staff and principal] work together as a team and that has helped me out of many stressful situations. The staff are supportive but I have to make sure that if they are having a hard time that I'm available . . . I'm supportive of them. So, each teacher gets half a day off . . . I teach their classes . . . . You have to be considerate at school. If someone needs to get off to the doctor at 3:15 . . . they can call on me to cover their class. If they just want me to support them they can call on me . . . .

Another elementary school principal expressed a similar point of view when he stated:

> If you go out of your way to assist staff in the things they need, they do the same for you . . . . It's the relationship that you develop with people not as their boss, but one to one, and they will treat you as you treat them . . . . I deal with their problems right away. I drop whatever else I am doing and they appreciate this. There is a real good feeling on staff because of this.

Appreciation and recognition of staff. Six principals also explained that they gained the support of members of staff and developed open working climates by recognizing and appreciating the achievements of staff. An elementary school principal explained:

> I try to do things to let them [the staff] know that I appreciate them . . . every time a birthday comes up we have a birthday cake and make sure they are recognized. Later on, I don't have to go after anybody to make sure that jobs are done . . . we talk things over and do things naturally. Therefore, we avoid some of the situations that create stress.

Another elementary school principal expressed his support for teachers in the following manner:

> . . . I feel that I am a teacher's kind of a principal in some respects; in other words, I have a great deal of respect for teachers, for their jobs, and what they do . . . so I try to involve them in a way or I try to let them know that I think they are worthy people.

A composite high school principal recognized the achievements of staff in the following manner:

> . . . I accept them [the staff] as human beings and professionals. I respect them for the fact that they also work very hard. I run my school as a team. My letterhead doesn't have just my name on it. It has all my department heads, my two counselors, my head secretary, . . . on it. I let them have their place in the sun with me because I feel that when they are part of a team they work harder.

Seven principals explained that dedicated and competent staffs were an important factor reducing their experiences of stress.

Dedicated and competent staff. In Chapter 4 it was reported that a foremost source of stress for principals is unsatisfactory, ineffectual, or incompetent personnel. By contrast, dedicated and competent staffs were identified by principals as a factor reducing their experiences of stress. An elementary school principal explained:

> . . . I think a great deal of stress reduction comes from my staff. They are a good staff; they work hard; they are creative; they are innovative; . . . .

Dedicated and competent staff provide principals with a sense of security. A junior high school principal explained:

> . . . a lot of stress goes when a situation arises that requires the employment of efforts towards achieving whatever it is and you know that you have the troops [teachers] out there who will get the job done competently. It's a very comforting feeling.

Five principals expressed confidence in being able to delegate some stressful duties to dedicated and competent members of staff. For instance, an elementary school principal stated:

> I delegate, it's my style . . . that's what I feel that I can do well. However, I also have receivers of whatever I delegate . . . . We have many extremely dynamic and effective teaching staff who are willing to demonstrate leadership by taking on additional administrative tasks.

A junior high school principal expressed a similar point of view when he stated:

> I delegate a fair amount but only to people who are prepared to take on the extra . . . I'm fortunate to have many capable people who accept duties that I delegate.

A composite high school principal who stated that he believed ". . . in delegation almost to a ridiculous extreme" explained that he felt comfortable assigning tasks to certain members of staff because ". . . they welcome that kind of a challenge." The principal added that:

> There is hardly a situation that comes up that I couldn't delegate 100 percent . . . therefore, I have the luxury of picking and choosing the problems that I want to work on . . . .

In conclusion it appears, therefore, that principals consider a mutually supportive relationship with staff an important factor reducing their experiences of stress. Principals foster such relationships, in part, by recognizing and appreciating staff for their achievements and by supporting staff with their personal and professional needs. Furthermore, when principals perceive their staff as dedicated and competent, and mutually supportive working relationships have been established, principals expressed confidence in being able to delegate some of their stressful duties to members of staff.

Open Communication and Participation in Decision-Making

An elementary school principal commented that, "The greatest fertilizer for stress is failure to discuss problems that grow in your mind from lack of talking." Open communication patterns and structures between principals and their staff were identified by a large proportion -- 53 percent -- of the principals interviewed as reducing their experiences of overall work-related stress. The comments of many principals regarding open communication as a factor reducing stress are represented by the following comment of an elementary school principal:

> By developing open communication and being very honest in relationships with people who you are working with -- I can't think of anything more important in reducing stress. It takes away many of the sources of stress and it gives you aid with coping with the rest . . . we [principal and staff] don't get into situations where problems get out of hand. With open discussion we reduce the problem by listening to the different points of view and by getting it into proper perspective . . . .

Open and honest communication between a principal and members of staff also reduce the likelihood of the formation of antagonistic staff factions. A junior high school principal explained:

> . . . because the discussions are open we have very few situations where it's the staffroom gossip and the little informal groups plotting to overthrow; . . . and the openness, I think, has removed that stressful factor.

An elementary school principal expressed the following similar point of view:

> . . . there are no personal tensions in this school. We [principal and staff] talk to each other very honestly and openly . . . there are no social cliques . . . . If you keep it open and honest then they [the staff] feel that they can be open and honest with you.

As part of the process of fostering open communication with members of staff, principals involve staff in certain levels of decision-making. An elementary school principal explained that open forms of decision-making reduce experiences of stress for the following reasons:

> . . . if you come across and say these are the things we are going to do this year, you get backs up immediately and it becomes a stressful situation for all parties . . . . One of the ways of reducing stress in this job is to have people develop a maximum awareness of the whole institutional collectivity . . . . It's a people business and people problems tend to be very complex. Therefore, I have worked very hard at involving the maximum number of people in the operation of this school . . . .

Principals explained that they involve staff in the decision-making process particularly when the decisions have some bearing on the staff.

An elementary school principal explained further:

> If there are things that affect the staff then the whole staff is involved before any decision is made . . . what I've tried to do is to get everyone to work on problems together and to get everyone comfortable with the result.

Four principals explained that formal decision-making structures which they instituted in their schools contribute to a reduction in their experiences of stress. Rather than attempt to deal with difficult decisions themselves, these principals re-direct problems to staff committees. By involving staff in such decision-making structures principals reduce staff discontent and the personal burden of decision-making. An elementary school principal explained:

> I set up committees to look into problem areas. They discuss issues and bring recommendations to a staff meeting . . . we [principal and staff] accept the recommendations or amend them . . . as a result our staff meetings tend to be information and decision-making sessions rather than squabbling sessions . . . . By doing this I have alleviated a lot of arguing that often occurs.

A composite high school principal provided the following additional insights:

> . . . what I have attempted to do is provide a structure that enables us [principal and staff] to get a lot of input from other groups and then use that information in making the final decision. We have a faculty council that meets weekly and that's the primary source of information . . . staff meetings are another information exchange . . . .

Another composite high school principal described the role of formal structures for communication and decision-making in reducing his experiences of stress:

> The faculty council identifies the need for new policy and delineates problems, constitutes task forces, reviews task force recommendations, and recommends policy and problem solutions to the administrative group [principal and assistant principals]. This staff group deals with a lot of the problems that some other principals pull their hair out trying to solve themselves. The staff are pleased because they have a stake in seeing that decisions are successful and I'm relieved of a lot of stress because they

help make many of the tough decisions.

From the comments of the above principals it is apparent that principals consider the participation of staff in decision-making a factor reducing their experiences of stress. Four principals emphasized that even though they foster open communications with staff and the involvement of staff in decision-making, they firmly retain the right to veto policy recommendations of staff. For these principals it would be more stressful to accept than reject a policy recommendation of staff that conflicts severely with their philosophical perspectives. A junior high school principal explained:

> . . . I want input from those people whom the decision is going to affect . . . . I will try and gather as much information as I can . . . and it all depends on what I think because the buck stops here . . . participation of staff in decisions can reduce stress but it can increase stress if you have to live with a decision that goes against your own philosophy.

A composite high school principal stated:

> I seek the participation of my staff whenever I can. If there is a decision that has to be made that affects the teachers I try to get as much information as I can in front of me. I understand that the decision is something that I have to make ultimately and I have to be prepared to live with it. So I try to make that clear to everyone when it's time to make decisions. While I want their input as much as I possibly can, I hope it's something we can all live with. It's still my decision to make . . . something I have to be able to support and I will have to live with as well . . . .

Another junior high school principal expressed a similar point of view:

> . . . I ask for input. I have meetings of department heads . . .; staff committees and task forces make recommendations to me . . .; but I've told the staff that the buck stops here and if it [a policy recommendation] is totally foreign to what I believe is best for the school then I won't accept it.

In conclusion, it appears that staff participation structures are mechanisms through which principals can re-direct stressful problems. Furthermore, open communications between principal and staff, and the participation of staff in decision-making appear to have a double effect: increasing staff satisfaction because staff have a stake in the decision-making process and reducing stress for the principal because staff support the principal in making difficult decisions.

Personal Factors

Principals identified certain personal qualities, attitudes, and coping styles as reducing their experiences of work-related stress. Insights provided by principals into these personal factors are examined in the following seven sub-sections.

Human relations approach. Four principals explained that they are "human-relations oriented" administrators and that this approach is for them the major factor reducing their experiences of stress in the principalship. An elementary school principal commented:

> . . . it's the personal, feeling, consideration bond that I have established with my staff that has been the key leading to a happy working relationship with the general reduction of problems . . . increased support . . . and the reduction of things that could be highly stressful problems in different circumstances because we [principal and staff] have this good working relationship.

A junior high school principal provided the following insights into how the human relations approach to administration has reduced his experiences of stress:

> I am a people-oriented person -- a humanist -- and I get a lot of satisfaction from working with people . . . . By treating people in a humanistic manner, I have been able to resolve most problems and reach whatever goal I was working towards . . . . I guess that I would have a lot of stress if I used the hammer approach consistently . . . I have always been able to communicate to people in a nice way that I was dissatisfied with what they were doing, and have gotten results, and they have felt good about doing it. That's my style. I avoid open and direct confrontations in most cases that way. Although I won't back off an open and direct confrontation if it happens, I tend to avoid it by that style and that has reduced stress for me.

A positive perspective. Five principals explained that their experiences of stress are reduced because they maintain "positive perspectives" of people and situations. An elementary school principal provided the following insights into what was meant by a "positive perspective":

> . . . a lot of stress reduction relates to my own personal philosophy of life and the way I treat people . . . I try and make the most out of every moment that I have with kids or teachers, and I try to be positive with them all the time . . . by turning everything around and making it a positive situation for them . . . I try to do this with the staff all the time, and I look for the positive and as a result the negative disappears or I can slowly work on that without much pressure . . . .

Another elementary school principal identified his positive orientation to people as the major factor reducing his experience of stress. The principal explained:

> . . . I don't find much stress at work because I am a very even tempered person and I am an extremely positive person . . . . I like people and I deal with people positively . . . and I try to bring out the best in people rather than looking at the negative aspects.

The following similar comment was provided by another elementary school principal:

> . . . I have come to grips with things personally, in terms of career expectations and what I consider is important . . . . If you focus in on what is bad then that will create more stress . . . by turning stressful situations around and looking at the positive side of things you reduce a lot of stress.

A flexible approach. Six principals explained that by adopting a "flexible" attitude and approach to administration they reduce their experiences of stress. This flexible approach to administration involves a willingness to compromise, to accept the points of view of other individuals, and to adopt innovations and adapt to change. The following comment by an elementary school principal is typical of the comments of the other five principals regarding the contribution made to a reduction in his experiences of stress by his flexible approach to administration:

> . . . I'm adaptable and that's one of the most important things. I am willing to try innovations and be flexible and adaptable . . . I can flow with changes as they come and that reduces a lot of stress on my part. I'm also the sort of person who is willing to compromise and take the other individual's good points.

A low-key approach. Three principals explained that they are not "over-reactive" individuals. Rather than react almost spontaneously to a perceived problem, these principals explained that they have the ability to listen calmly, to gather further information, and to formulate a more appropriate course of action. An elementary school principal explained:

> I think that I experience only mild stress in this job because I'm basically a low-key individual . . . . I don't get over excited or unnecessarily angry at people.

An elementary-junior high school principal also explained:

> I've never been particularly reactive except for a minute or two, then I start to think about the situation, and if I don't have enough information I go and get it before I react.

Another elementary school principal stated:

> . . . I don't panic, at least I don't think I have ever panicked. I do a lot of listening. When parents come in and they are irate about something I do the listening, and after I have done the listening I will try and formulate some kind of a final attack and solve the situation . . . . I don't fly off the handle . . . . I also don't get stampeded into decisions -- I like to think about them.

Ability to keep the job in perspective. Nine principals identified a personal ability to keep the role of principal within a "reasonable perspective" as a factor contributing to a reduction in their experiences of work-related stress. An elementary-junior high school principal explained that he manages to reduce his experiences of stress in the principalship by:

> Keeping the job in perspective . . . . I have a couple of kids who are important to me. I have got to keep everything in some kind of reasonable perspective, it's a big job and it could consume me . . . . Recently I was divorced and went through a situation where that was one of the things that consumed the last marriage -- the work, it really was a very heavy factor.

An elementary school principal provided the following similar comment:

> . . . I'll give my best when I'm here but when I get home I give my best to my family because that's my time there . . . . This is a professional job to me; it's important, but it's still a job. It's not going to take away from my life so much that it's going to destroy my homelife; so I try to keep it in that sort of perspective.

Three principals emphasized that they manage to keep their commitments to the principalship in perspective by refusing to take work home. The following comment by a junior high school principal is typical of the comments of these principals:

> . . . I don't leave here until I have done as much as I can. When I do leave, I leave it. I don't take work home with me. I refuse to do that. When I'm home, I'm home, ... I developed a duodenal ulcer two years ago; so I've taught myself to leave work behind me . . . .

Establishing priorities and planning a course of action. Seven principals identified the coping strategy of establishing priorities and planning a course of action as a factor that reduces their experiences of overall work-related stress. By establishing priorities they avoid spending an inordinate amount of time on tasks that are not important, and by planning a course of action these principals establish tactics to increase the likelihood of completing important tasks. An elementary-junior high school principal explained:

> . . . I set priorities and usually write down all the things that I have to do . . . I get a certain amount of satisfaction from scratching them off as I do them.

The following comment which is similar to comments of other principals was provided by an elementary school principal:

> . . . what I try to do is plan a course of action for the day based upon priorities that I have in mind -- a timetable -- and that gives me some comfort in that I can see that there is a way of completing the important things step by step . . . . I very quickly sort out those things I must deal with as thoroughly and carefully and as practically as I can . . . .

Recreational activities and outside interests. Five principals explained that they participate in certain recreational activities and pursue "outside" interests. An elementary school principal has a lakeside holiday house which he and his wife visit each weekend; a composite high school principal coaches and organizes hockey; another elementary school principal is an avid gardener; and a junior high school principal and a composite high school principal are involved in ornamental tree farming. These "outside" interests provide principals with opportunities to relax and regain strength to deal with work-related stress that cannot be avoided. The following additional insights into the perceived benefits of diversionary interests were provided by a composite high school principal:

> I'm heavily involved in coaching and organizing hockey . . . I view it as a diversion and a tremendous way of relieving tension that has built up at work, and it's something that I enjoy. When I'm involved in that [hockey], I don't spend time thinking or worrying about what's happening here [at school] . . . I find it essential that I have something that I can put my thoughts to when I am away from school and if it's not hockey there are always other things that I enjoy doing . . . . I think I can relax . . . and I can find diversions. That way I feel refreshed when I come to work and I have more energy to deal with day-to-day hassles.

In summary, the following personal orientations were identified and described by some principals as reducing their experiences of overall work-related stress: (1) adopting a human relations approach to administration, (2) maintaining a "positive perspective" of people and situations, (3) adopting a flexible attitude and approach to administration, (4) adopting a "low-key" manner, (5) keeping the work of the principalship within a "reasonable" perspective, (6) establishing priorities and planning a course of action, and (7) pursuing recreational activities and "outside" interests.

School and Contextual Factors

Several school-related factors were identified by 13 principals as contributing to a reduction in their experiences of work-related stress. These are: small schools, academically oriented and well-behaved students, and an accepting, undemanding, and supportive community. Insights provided by principals into these factors are examined in the following four sub-sections.

Small schools. Three principals explained that because their schools are small, in terms of the number of enrolled students, communication patterns between principal and staff are not formal; there are few opportunities for the formation of antagonistic staff factions; and there are fewer day-to-day problems and crises than in larger schools. Furthermore, it is possible for the principal of a small school to learn the names of all the students in the school. Three elementary school principals considered it important that they know the names of their students and that they have some knowledge of the background and achievements of each child.

These three principals held principalships of schools in which student enrollments had declined severely during the early 1970's and now the enrollments have stabilized at low numbers. For instance, one elementary school principal whose school had an enrollment of about 140 students explained that during the 1960's his school had a peak of 650 students. Hence, physical facilities for pupils in small schools that once had large enrollments are more than adequate. The following comment by the principal of a very small elementary school is typical of the comments of three principals of small schools:

> The size of this school is a reason why I don't experience much stress, but I think it's the combination of people on the staff that's more important . . . being a small staff, communication is good. We don't have to have a lot of formal staff meetings. Any information we want shared we do on a daily basis, no cliques, no back biting, few problems, . . . ; also, the fact that I know all the kids on a first name basis. It would be a stressful situation for me to have to keep asking a child its name and have to deal with kids by Christmas time still not knowing their names.
>
> We have more space than we need . . . that helps because it allows the teachers to be very flexible with programs -- gym, drama, . . . so I don't encounter problems in that regard.

Students. Three principals explained that because they have predominantly academically oriented and well-behaved students enrolled in their schools they seldom have to deal with stressful student disciplinary matters. Typical of the comments of these principals in this regard is the following comment by a composite high school principal:

> This is a very desirable high school to be in, . . . the students are above average in academic orientation. Overall the general conduct of the students is better than you would find in most high schools, . . . the students don't on a regular basis create a lot of problems. It's a quiet school in that regard . . . .

Accepting and undemanding communities. Seven principals identified the accepting and undemanding nature of the communities of their schools as reducing their experiences of work-related stress. Three principals described the communities of their schools as "blue collar." According to these principals such working-class communities are more accepting of difficult administrative decisions affecting the school than upper-middle-class communities. Furthermore, "blue-collar" communities tend to be less demanding of principals than upper-middle-class communities and they also tend to assign more authority to principals and teachers regarding decisions that affect the education of their children. An elementary school principal provided the following insights into this stress-reducing factor:

> This particular area is a low-to-middle socio-economic strata; mostly working, blue-collar people, ... The community is a very informal kind of community, . . . it's a more relaxed community, in those terms, because they do not make demands on you; they accept what you say. For example, when I told them that our population is declining [student enrollment] and because of that declining population we need to change our organization next year in terms of split grades -- combining different grade groupings --, they said: Fine, we can understand that because our budgets at home are similarly being hampered and we have to make certain cuts; we can understand; we don't agree with it, but we can understand why you're doing it. In the other community [the principal's previous school had a community that was described by the principal as having ". . . a lot of university personnel, professional people, business people; and it was upwardly mobile"], they would say: But that makes it an ideal situation if you only have twelve youngsters in a class. They looked at it from a different perspective . . . and said: That's what we are aiming for; that's what we want, and you'd better give it to us . . . and they were putting constant pressure on myself and the various associates [superintendents] to deliver that kind of program. And, they wouldn't have any qualms about writing to the superintendent and bringing him down to a meeting, and it was just a different kind of community.

Another elementary school principal provided the following supporting comment:

> . . . we [the school] are in a blue-collar community, . . . and sometimes these people don't know how to complain or where to complain, and so they won't complain. Also we are dealing with a group of people who think education will presumably make a difference to their kids . . . . And, they'll leave it in the hands of the school.

Four principals also described their school communities as supportive.

One of these principals stated:

> . . . the parents and community use this school more than any other school in the Millwoods area . . . the closeness of the parents to the school leads to support and this reduces stress . . . .

In summary, the following school and contextual factors were identified and described by some principals as reducing their experiences of overall work-related stress: (1) small schools in which communication patterns are relatively informal, conflicts and problems occur infrequently, facilities are more than adequate, and principals can get to know each child very easily, (2) academically oriented and well-behaved students, and (3) an accepting, undemanding, and supportive school community.

FACTORS IDENTIFIED BY PRINCIPALS AS HAVING CONTRIBUTED TO OVERALL WORK-RELATED STRESS

> *3.6. What individual and contextual factors are identified by principals as having contributed to their experiences of overall work-related stress?*

A semi-structured interview schedule (shown in Appendix B) was used to provide principals with the opportunity to identify and describe aspects of their schools, their administrative styles, or any other factors that contributed to their experiences of overall work-related stress. *A priori* analysis categories were not employed; rather the interview data were explored with the purpose of developing analysis categories directly from the data. The analysis categories which emerged from the data were explored further with the purpose of gaining as complete, holistic, and contextual portrayals as possible of factors which contribute to principals' experiences of overall work-related stress. Content analyses of the 36 interview transcripts revealed four categories of factors which principals identified as contributing to their experiences of stress. Most of these categories contain a number of sub-categories. The four factors which emerged from the data were labelled:

1. The isolation of not having an assistant principal;
2. Entrenched, uncohesive, and unsupportive staffs;
3. Personal factors; and
4. School and contextual factors.

Principals' descriptions of each of these four factors and sub-categories of these factors are examined in the following four sections of the chapter. "Salient" sub-categories of the major factors are reported. A sub-category of a major factor was considered "salient" if it was identified spontaneously by 3 or more principals -- at least 8 percent of those interviewed.

The Isolation of Not Having an Assistant Principal

In Chapter 5 it was reported that 18 principals -- 36 percent of the respondents -- held principalships of small schools that were designated "one-administrator" schools. Nine of these principals spontaneously identified during interviews the isolation of the role of principal of a "one-administrator" school as a factor contributing to their experiences of overall work-related stress. These principals felt isolated because they had no assistant principal with whom they could discuss administrative problems. They described their role as "jack of all trades and master of none" because they were part-time administrators and part-time teachers with insufficient time to complete these functions to their satisfaction. Insights provided by nine principals into aspects of the principalship of "one-administrator" schools contributing to their experiences of stress are examined in the following three sub-sections.

Isolation. An elementary school principal stated that, "School administration is a fairly lonely position and that in itself is a contributing factor to stress." Principals of "one-administrator" schools explained that they felt particularly isolated at times because they did not have an assistant principal from whom they could seek advice and support. An elementary school principal explained:

> I don't have an assistant principal . . . . I feel like an island . . . and as a result I don't really have anyone on staff whom I can share with to get problems off my chest . . . .

Another elementary school principal provided the following further explanation:

> In a small school you are in a sense alone. There are things you can't discuss with someone else. Things are happening, you don't have the answers, . . . and if you start disseminating information to staff then it upsets them. You don't have another administrator to discuss it with; you have to find some other outlet . . . my outlet is other principals but sometimes you can't get through or they really don't understand your specific problem . . . . I would experience less stress overall if I had someone [an assistant principal] in the school.

It is often not possible for principals to seek advice of staff because of ethical considerations or because staff are not interested in becoming involved in administrative decisions. An elementary school principal explained further:

> . . . there are times when you'd like to cry on somebody's shoulder. There are times when you'd like to ask someone's opinion and you can't always do that with your staff because some of them don't really know and don't care about the administrative detail or administrative problems. Not that they're negligent . . . it's just not their arena and they don't want any part of it. They're very happy with what they are doing . . . .

Another elementary school principal added:

> What I miss the most in this school is somebody to talk to -- an assistant principal or a fellow administrator. The teachers are aware of most situations but you get into professional difficulties by discussing sensitive problems with them.

Three principals commented that even though they contacted other principals in "similar situations" for advice it is not the same as having an assistant principal with a thorough understanding of the unique school context. A junior high school principal explained:

> . . . in a one-administrator school nobody else has the same outlook on the job as you have . . . . You can contact other principals and bitch and holler but we're not in each other's shoes. We can only listen and offer little bits of advice, ...

Jack of all trades. Many principals of one-administrator schools have part-time teaching assignments. The principal of a one-administrator elementary school stated:

> I feel that I'm a jack of all trades and master of none . . . . I don't have enough time to be an administrator and never have enough time to prepare and be a good teacher.

Another elementary school principal who did not have an assistant also commented that a contributing factor to his experience of stress was that he had to be available continuously as the principal of the school and for part of the time he had a teaching commitment. He added, ". . . you have to balance what you are doing; you are constantly juggling your time commitments and responsibilities to each function."

Another principal of a one-administrator elementary school explained that because he had to be available continuously he could not work on important major tasks without interruption. He added:

> Because I am the only administrator in this school I could not go in and shut the door for two hours and work on the budget . . . . If I had an assistant then he could act as a buffer by dealing with a lot of the day-to-day hassles.

Delegation of some duties is often difficult for principals who do not have an assistant principal. An elementary school principal explained:

> . . . an area which causes great stress for me is that I have not learned how to delegate to anyone. For one thing in this school I have nobody to delegate it to. If you have an assistant principal or a counselor in the school then you can say: Would you take care of this matter? You can parcel out some of the jobs.

In summary, it is apparent that principals who do not have an assistant principal are without an important source of advice and support. The role of administrator has been described as a "lonely position" and it appears to be particularly lonely for principals of one-administrator schools. Furthermore, principals without an assistant frequently complain of being unable to accomplish tasks to their satisfaction because of the range of duties they have to undertake. Delegation of duties is difficult because these principals do not have an assistant principal to whom they can delegate certain responsibilities.

Entrenched, Uncohesive, and Unsupportive Staffs

Three principals described teachers on their staffs as "highly competent," "intense," and "powerful" individuals. These teachers were considered powerful by the principals in the sense that they had intense personalities; they made strong individual demands of the principal; they had considerable expertise in their teaching disciplines; and they were very critical of most policy proposals of the principal. As a staff, they were described by the principals as "uncohesive" and "split into factions." The three principals identified such uncohesive staff as a major factor contributing to their experiences of overall work-related stress. An elementary school principal provided the following further explanation:

> . . . the teachers are all very competent, very powerful people, and their personalities don't always match. They are excellent in the classroom, really good with kids, but very intense personalities, . . . intense in that they are demanding on themselves and very demanding on me. They don't work well together as a staff. Many of them are too individual . . . some of them are too intense, too strong, and too demanding on my emotions.

A junior high school principal provided the following insights:

> Well, when I came to this school the staff was split into factions -- it was departmentalized. Each department was working as a separate group under themselves. After the first few staff meetings this became very, very evident to me -- to the point where I just stood up from the chair and just called a halt to the whole meeting and I explained to the staff that this was the biggest bunch of nonsense that I'd ever seen before. I'd never seen a staff acting that way. They were a solid staff -- a competent teaching staff -- but they had pocketed themselves into so many groups, ... The cooperative spirit was just lacking for a long time. That has been about the most stressful factor in this job for me.

The third principal stated that, "Teachers here are probably the most stressful part of my job -- the actual staff that I have . . . ." This principal explained further that:

> . . . the teachers are really powerful individuals, and so when you have meetings there is no hesitancy in telling you that you're an idiot . . . . A principal here has to combat really individual types -- very powerful types of teachers. They aren't powerful as a group because these teachers can't all work together but they can individually sabotage most things. As a group they don't move in the one direction so in terms of leadership here it's demanding. The last time they worked as a group was getting rid of the previous principal . . . . We can work together with some uniformity on small things but on some crucial issues we have a great deal of trouble working in one direction. So that type of thing, in terms of leadership, is very stressful because whatever you come forward with in terms of policy or plans you know is never going to be accepted by the group, ...

Two other principals explained that they found their first year of appointment to their present schools very stressful because they came into schools in which the staffs were well established and entrenched. An elementary school principal explained that:

> . . . the staff were well established before I came here . . . there was a fairly long period of adjustment for all of us . . . that created stress. They had been happy with the previous principal and saw me as a threat to the order that had been established for years before.

Another elementary school principal provided the following insights:

> The staff has been here for a number of years and me coming in new has been a stressful factor. That has been overcome by the fact that four teachers left last year and I was able to replace them with people that I interviewed. There is still the lingering -- the tradition that has been carried on -- it comes with the school, it is still here, and to change that as fast as I would like to change it is stressful.

Two elementary-junior high school principals indicated that a factor contributing to their experiences of stress was that the elementary and junior high school staffs were not cohesive and did not work well together. One of these elementary-junior high school principals commented:

> This staff will never be a group. I basically have two staffs -- one an elementary staff and the other a junior high staff -- who do not work together . . . . You do need to have a staff that can work together for the benefit of kids . . . there are set divisions within the whole staff, factions within each staff, and inter-staff conflicts. So relations are not great . . . it's the most divided staff I've ever worked on as a teacher or administrator.

The other elementary-junior high school principal stated that:

> . . . when I arrived at the school . . . there was no communication between the elementary staff and the junior high staff . . . . I have not been totally successful but we are getting there . . . the staff are becoming more cohesive.

In conclusion it should be noted that even though uncohesive, demanding, and unsupportive staffs were identified as a factor contributing to the overall experience of stress of a few principals, the majority of principals -- 94 percent -- reported in item 2 of the questionnaire that their staffs were "average" or "above average" in cohesiveness.

Personal Factors

It was reported in the first section of this chapter that only four principals -- 8 percent -- described the role of principal as "very stressful." A number of personal factors were identified and described by principals during interviews as contributing to their experiences of overall work-related stress; however, some of these personal factors were identified by only one or two principals. In view of the fact that stress is a personal phenomenon, it was deemed appropriate to report in brief all personal factors identified by principals as contributing to their experiences of overall work-related stress even though some factors were identified by only one principal. Insights provided by principals into personal factors contributing to overall work-related stress are examined in the following five subsections.

Low personal drive and energy. Two experienced principals explained that they had lower personal energy and drive than when they were younger. One of these principals explained further:

> . . . personal energy is a real factor [in his experience of stress] . . . I don't have the energy today that I had 10 years ago . . . . with some things you get smarter as you get older but you also lose some of the energy. I can't handle today the impatience and conflicts and so on that I used to handle 10 years ago . . . . We [older principals] are in the situation where we are potentially burned out yet we have to hang in there.

The other principal stated:

> . . . I put it down partly to my advancing years because I was always a little more resilient -- higher energy level than I have now . . . you know, I feel stress more than I used to.

Loner. A principal who reported the role of principal as "very stressful" explained that he is a "loner," and that he is reluctant to share problems and seek support. This principal provided the following additional insights into personal predispositions which in his perception contribute to his experience of overall work-related stress:

> . . . I tend to be a loner. I tend to keep everything inside; I don't share a lot; I'm not the kind of person who is constantly on the telephone blowing off my steam to somebody . . . . I do have some discussions with one colleague . . . we do share a little that way . . . . I'm reluctant to share on a group basis because, I suppose, it's an admission of incompetence.

Reluctance to compliment staff. Two principals explained that they experience personal difficulty in complimenting and rewarding members of staff. They experience uneasiness and stress because they feel that as administrators they are expected by staff to acknowledge or reward staff for their achievements. This they find by nature difficult to do. One principal explained further:

> I'm not the type of principal who boots you in the rear for not doing your job . . . on the other hand I'm not the type of person who is constantly patting you on the back . . . and that's a weakness I guess. That is also something that adds stress in that I feel people expect to be rewarded a lot more than I reward them. I find it very difficult; that is something that I can do better in a group situation than on a person to person basis.

The other principal stated:

> . . . I think that I have a kind of a personality problem -- complimenting people and things like that does not come easy to me. I'm also not an easy kind of a mixer. And, I think that's part of the situation, as far as my stress is concerned, that in a way I don't feel very easy in the role all the time.

Taking the job too seriously and personally. Three principals felt that a contributing factor to their past experiences of work-related stress was that they had taken the responsibilities of the job, failings of other people, and conflicts that had occurred with members of staff too seriously and personally. In a sense, as one principal stated, they had taken the job and the failings of others "too much to heart."

Another one of these principals stated that he had experienced a period in the principalship that was extremely stressful and during which he almost had a nervous breakdown. This elementary school principal explained that:

> . . . the major contributing factor to the amount of stress I felt a few years ago was of course my own doing, first of all, and taking things very very personally if things went wrong, if people complained, and if someone had poor teaching practice. I was taking fights [conflicts with staff] personally; this was my fault, if not my responsibility and of course I paid dearly . . . . I was inclined to take the inadequacies of the business [the education system], and the inadequacies of my staff too personally.

The principal explained further that at the time of the interview he was experiencing only "mild stress" in the principalship because he had ". . . a much better perspective of the job." He provided the following additional explanation for the reduction in his experiences of work-related stress:

> . . . I have become much more objective about almost every aspect of the job. I tell myself several times that if I walk ten steps away from this building nobody cares. If I go a block away most of the people living around here really don't care much about what's going on in this building for five hours of a day, and if I go further than that people don't even know it exists, so be sensible, get the job into perspective . . . the inadequacies of teachers, caretakers, I don't get too upset about it. I try to do something about it, but not take it as something I should be able to solve in half an hour or make perfect in twenty minutes. I can't and nobody else could either. I have a much better perspective now.

Another elementary school principal who reported the role of principal as "very stressful" explained that a factor contributing to his experience of stress was that he had taken the job too seriously and the failings of others too personally. He added:

> . . . I see myself as being a perfectionist. I really try to be and want to be very conscientious -- a genuine leader. I want to set an example to my staff through my particular dedication and application to the job. But I feel that I have tried to be too perfect and I have taken it too much to heart if others have not come up to my expectations. So I guess that it's a combination of personal factors that makes this job so stressful for me.

The third principal explained that he tended to take the responsibilities of the principalship too seriously and consequently his life was consumed with work-related concerns. He explained further that:

> . . . it still comes down to a personal perspective -- it's the ability to let go. I don't have that ability very well . . . . People who find this job less stressful have got the ability to be able to walk away at 5 o'clock and essentially let go. I've never been able to let go of this job; it stays with me literally the whole time; that's a source of stress . . . . From the perspective of professional obligation on my part . . . in itself, I think the style [his administrative style] is a source of stress. It's a factor in my experience of stress in the sense that I tend to carry a tremendous feeling of responsibility for so many other people all the time.

In summary, the following personal factors were identified and described by some principals as contributing to their experiences of overall work-related stress: (1) having low personal drive and energy, (2) being reluctant to share problems and seek support, (3) experiencing personal difficulty in complimenting and rewarding staff for their achievements, and (4) taking the job too seriously and personally.

School and Contextual Factors

Two school and context-related factors were identified by seven principals as contributing to their experiences of stress. These are: the type of school and the nature of the community. Insights provided by principals into these factors are examined in the following two sub-sections.

Type of school. Two junior high school principals identified the early adolescent nature of junior high school students as contributing to their experiences of stress. One of these principals explained:

> . . . the nature of the junior high school student -- the early adolescent -- makes the junior high situation much more stressful [than the elementary or composite high school contexts] . . . they [the students] are kids one minute and adults the next . . . . It's difficult to know how to deal with these students . . . . Do you deal with them as kids at this particular time or as adults? Managing student behavior and conduct is part of our responsibility and a school like this provides more [disciplinary problems] than a typical elementary [school] or a composite [high school].

A different point of view was expressed by a composite high school principal who stated:

> Elementary and junior high kids are a piece of cake. Junior high kids are raunchier and perhaps a little harder to discipline at times but when you go into a large composite high school I think the difference is the multiplicity of things to remember and the multiplicity of things to be on top of. And, you have to be aware of everything that is going on at the school at all times . . . . There may be in your mind, on any one day, 30 very important things, . . . the multiplicity of things leads to high pressure and that makes this job more stressful . . . .

Rather than compare the stress experienced by principals of different types of schools, it seems more fruitful to conclude simply that the early adolescent nature of junior high school students contributes to the stress experienced by two junior high school principals and the multiplicity of concerns impinging upon composite high school principals contributes to one composite high school principal's perception of overall work-related stress.

Community. Four principals whose schools are located in relatively new communities of Edmonton identified certain characteristics of these communities as contributing to their experiences of stress. These communities were characterized as having a diverse cultural mix, a broad socio-economic profile, a predominance of families in which both parents work, and few community facilities such as a corner store or a community centre. Principals experience difficulty gaining parental involvement in school-related concerns because in many families both parents work. A junior high school principal explained further:

> One of the frustrations for me in this community is that so many are single parents or both parents are working -- getting them to see us to resolve problems and our concerns [about their children] is very difficult.

An elementary school principal added:

> We can't get community involvement. At a parent advisory meeting if I get 10 parents out of 300 I'm doing extremely well. It's partly because of the broad ethnic background of the community. It's a very new community. People are getting their lawns down; they have a lot of personal things to worry about and being involved in school activities is probably not one of them. The other thing is that the majority of parents both work and a lot of them are working shifts and double shifts so they just don't have time.

Two elementary school principals whose schools are located in developing communities also explained that they and their staffs have to assume additional responsibilities in dealing with the problems of their school communities. One principal explained:

> Here we get those people who are struggling financially -- they have high mortgages on their new homes; there is a high rate of marriage break-ups in this area, . . . so you are not only dealing with school-related problems you become much more actively involved in social work problems and in dealing with children who have just gone through fights, beatings, and family break-ups. Trying to get them working on their academic programs when the teachers are getting upset because kids are throwing tantrums in school is very difficult. And, this is not really the result of anything that has to do with the school, it's the community.

The other principal provided a broader perspective of the additional responsibility that is assumed by his school. He stated:

> . . . we [the school] have a fantastically diverse cultural mix. I sense that some of the people whose children attend here are overly demanding of the kinds of services they expect. I'm also sensitive to the nature of the working populace in this area. I can appreciate the fact that a lot of these people both have to work in order to keep the mortgage payments up. So this places a different kind of responsibility on the school, . . . I really feel that the school needs to be a stabilizing influence in this community which doesn't have anything in it except houses. There isn't even a local corner store for the kids to hang out at. There's no community league, there's nothing, not even a playground . . . so that puts all kinds of pressure on us [principal and staff] that we would not have in another community.

Two elementary-junior high school principals whose schools are located in high socio-economic communities of Edmonton identified certain characteristics of these communities as contributing to their experiences of stress. Parents in these communities were described as well educated, very influential, and demanding. The two principals explained that their work role in these communities is "very visible"; that they have to be politically astute to survive; and that they are subjected to a multitude of effectively articulated demands and expectations. One of these principals stated:

> The other stressful factor [in this job] is the type of community that this is. It's a very high socio-economic one and people have very great expectations of their children and the school -- for what the school is going to do for their children . . . . The people in this community are used to getting what they want and they are used to using all kinds of pressures . . . .

The other elementary-junior high school principal provided the following insights into the nature of his school's community and the impact that demands from the community have upon his work role:

> The parents are very "moneyed" people, very well spoken, very influential, and they know their facts. When they phone you up or come in to see you about something they are not the kind of people you are going to snowball with educational jargon. You have to know what you are doing and do your homework and be very well on top of what is happening here . . . survival is being politically astute here . . . generally when you are dealing with a highly educated clientele from doctors and lawyers to very wealthy business men in

> the area they are very imposing. They come on very strongly and they're threatening in a way . . . parents here phone trustees as you and I would phone next door neighbors -- it's a very visible job, ...

Extra-Organizational Stress

Three principals explained that extra-organizational experiences of stress have some bearing on their abilities to cope effectively with work-related demands. Whenever they experience high levels of stress in their private lives or from extra-organizational situations they cope less effectively with work-related situations and consequently experience more work-related stress. A principal stated:

> . . . when I feel comfortable in my personal relationship with my family then I feel more comfortable here on the job, generally speaking . . . . The things on the job are probably all surmountable if personal or family relationships are OK. I find that when there are strong stress-related things in the family whether they be financial, communication problems, or whatever then I tend to carry those over into my job and, though sometimes my job is a refuge, it also gets to the point when there is just too much and I can't cope . . . .

Another principal explained that whenever there was a "flare-up" of a particular personal problem at home he experienced stress in dealing with work-related situations that ". . . normally caused no problems."

EDMONTON PUBLIC SCHOOL SYSTEM FACTORS AND OVERALL WORK-RELATED STRESS

> *3.7. What Edmonton Public School System factors are identified by principals as being associated with their experiences of overall work-related stress?*

In response to the last two major questions of the semi-structured interview schedule, 21 principals *spontaneously* identified at least one of three recent changes in the administration of schools in the Edmonton Public School System -- school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals -- as having some bearing upon their experiences of stress. While aspects of school-based budgeting, the one-line authority structure, and the involvement of principals in the selection of personnel for their schools were identified by some principals as reducing their experiences of stress, other aspects of each factor were identified as contributing to their experiences of stress. Most of the other principals who, in response to the last two major questions of the semi-structured interview, did not *spontaneously* identify any of the above three factors as having a bearing upon their experiences of stress were asked to respond to the following three additional questions:

1. *What effect, if any, does school-based budgeting have upon your experience of work-related stress?*
2. *What effect, if any, does the one-line authority structure have upon your experience of work-related stress?*
3. *What effect, if any, does your involvement in the selection of personnel for appointment or transfer to your school have upon your experience of work-related stress?*

The interview data were content analyzed with the purpose of gaining a more fully grounded understanding of those aspects of school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals reducing principals' experiences of stress and those aspects of each of these factors contributing to principals' experiences of stress. Insights provided by principals into aspects of the above three factors that reduce or contribute to principals' experiences of overall work-related stress are examined in the following three sections of the chapter.

School-Based Budgeting

The major instrument for planning educational activities is the school budget. At its best the formulation of a school budget involves the identification of educational needs, objectives, and priorities, and hence the development of a plan for allocating a school's financial resources. The following definition of school-based budgeting was provided by Caldwell (1980:21):

> School-based budgeting exists in a school system when the school board or central office administrators provide principals, in consultation with staff, with an opportunity to prepare and administer a budget for the allocation of resources at the school level, with such a budget to include allocations for certificated and non-certificated staff as well as for supplies, equipment, and services.

In the school-based budgeting process, school-based personnel are assigned authority to allocate funds to a variety of budget categories in accordance with priorities that have been established at the school level and within guidelines defined by provincial statutes, school board policies, and collective agreements with employee organizations. The underlying belief is that decisions should be made by the operating unit that is closest to the area of involvement and competent to handle the decisions.

The rationale for the implementation of school-based budgeting, according to Caldwell (1980:22), is four fold: (1) to meet increased demands for sensitivity to local needs and problems, (2) to reverse the effects of size and centralization, (3) to increase school-level accountability, and (4) to satisfy requests for professional involvement. Garms et al. (1978:278) add that school-site budgeting rests on the assumption that public schooling will improve if educational consumers are given greater responsibility for deciding what educational services are to be provided.

In December, 1979, the Edmonton Public School Board approved an administrative recommendation to implement school-based budgeting on a system-wide basis as of the 1980-81 school year. Principals are advised in early February of each year of the guidelines for budgeting and the lump-sum allocation to their schools. School budgets are submitted to associate superintendents in mid-March of each year. School Board approval of school and system budgets follows in May of each year.

Solicited and unsolicited responses from principals reported in Table 6.5 reveal that school-based budgeting both reduces and contributes to principals' experiences of overall work-related stress. However, an inspection of the frequency distribution of responses reported in Table 6.5 also reveals that a majority of principals -- 53 percent -- identified school-based budgeting as reducing their experiences of work-related stress, whereas a small proportion of principals -- 9 percent -- identified school-based budgeting as contributing to their experiences of stress. Twenty-nine percent of principals identified some aspects of school-based budgeting as contributing to stress and other aspects as reducing stress. Nine percent of principals felt that school-based budgeting had no effect upon their experiences of stress.

Insights provided by principals into aspects of school-based budgeting that reduce principals' experiences of overall work-related stress are examined in the following sub-sections of the chapter.

Aspects of school-based budgeting that reduce overall work-related stress. Firstly, principals explained that their experiences

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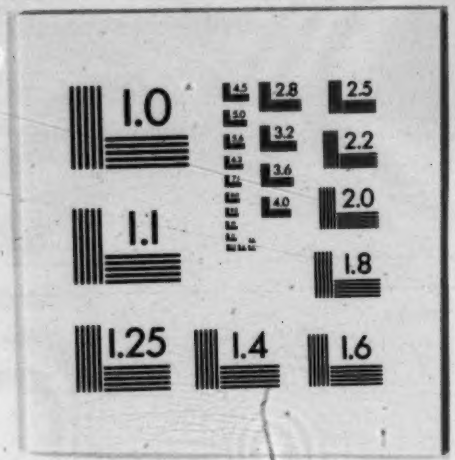
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Table 6.5

Distribution of Solicited and Unsolicited Responses to the Impact of School-Based Budgeting Upon Principals' Experiences of Overall Work-Related Stress

Impact of School-Based Budgeting Upon Stress	Spontaneous Responses	Solicited Responses	Total Responses f	Total Responses %
Reduces Stress	12[a]	6[b]	18	53
Reduces and Contributes to Stress	4[c]	6	10	29
Contributes to Stress	1[d]	2	3	9
No Effect on Stress	0	3	3	9
Total Responses	17	17	34[e]	100

[a] This means that 12 principals *spontaneously* identified aspects of school-based budgeting as reducing stress.

[b] This means that 6 principals identified aspects of school-based budgeting as reducing stress in response to the question: *What effect, if any, does school-based budgeting have upon your experience of work-related stress?*

[c] This means that 4 principals *spontaneously* identified some aspects of school-based budgeting as reducing stress and other aspects as contributing to stress.

[d] This means that 1 principal *spontaneously* identified aspects of school-based budgeting as contributing to stress.

[e] Two of the 36 principals interviewed did not provide responses to the impact of school-based budgeting upon their experiences of work-related stress.

of stress have been reduced because the implementation of school-based budgeting has removed many constraints to decision-making. For instance an elementary school principal stated that, ". . . they [the School Board] have taken away all the restrictions which were very frustrating for me and I find it far less stressful than it used to be."

Principals have been assigned greater authority and control with respect to the administration of their schools. An elementary school principal provided the following illustration:

> . . . it's now to the point that when somebody comes and tells me that our library program isn't working in this school at all, I accept the criticism and say: What do you base that on? Tell me what's wrong? And, we discuss the problem. Before [the implementation of school-based budgeting] if they came . . . I could only respond by saying: If they'd only give us sufficient library funds we would have a good library . . . . Now, I don't get the feeling that I can't do anything about it . . . I no longer throw up my hands and say: What do you expect me to do? There used to be restrictions that were so tight . . . we have more control now over our own concerns.

Another elementary school principal added that:

> . . . school-based budgeting has for me brought about a general reduction in frustration and stress because I have more ability to control and manipulate my own domain. I now have the controls, where before I used to have to go to staffing department and say: Look I'm trying this little thing in my program and I need a half-time teacher or something like that. I used to have to almost go down there and beg for this thing and then find out it was going to be a decision made by somebody else, and decisions that were made were hardly ever explained.

Secondly, principals explained that with the implementation of school-based budgeting their educational leadership role has been enhanced because they can exercise more flexibility in the implementation of educational initiatives to meet the unique needs of their schools. For instance a junior high school principal stated that, ". . . it [school-based budgeting] reduces the level of stress in that you can design a service to fit the needs of your community." Another junior high school principal provided the following further explanation:

> . . . it [school-based budgeting] has enhanced our educational leadership role because now we have the power, freedom, and money to implement the educational programs that we once couldn't have . . . . It's enhanced our educational role in terms of having a need in the school and being able to tackle that need head-on rather than go through a chain of command and wait until budgetary monies are made available.

Thirdly, principals explained that school-based budgeting reduces their experiences of stress because the budgetary process reduces ambiguity. A composite high school principal stated that:

> School-based budgeting has reduced a lot of the ambiguity that was in our role and relieved a lot of the stress in the principalship . . . we know how much money we are getting and how we can spend it to operate our organizations.

A junior high school principal explained that with the implementation of school-based budgeting he had become more knowledgeable of the various curriculum areas in his school. He added:

> . . . I know much more about curriculum areas which are not my expertise areas, ... When a group comes in, they make a submission to me and they have to justify their areas. This automatically carries me over to making me more knowledgeable about the processes of that curriculum area.

Insights provided by principals into aspects of school-based budgeting that contribute to principals' experiences of overall work-related stress are examined in the following sub-section of the chapter.

Aspects of school-based budgeting that contribute to overall work-related stress. Firstly, the additional time demands on principals and staffs for preparing the budget were identified by principals as an aspect of school-based budgeting that contributes to their experiences of stress. The budgetary process occurs during February and the first half of March of each year. These months were described by principals as the period of the school year when school-level demands are normally more intense. The school-based budget is an important deadline that creates additional pressure for principals and staffs. An elementary school principal explained further that:

> . . . a large amount of responsibility is attached to this [the budget] because it's the plan for the coming year. It involves a number of meetings with staff members, professional and support staff, and community members to get their input into it and taking all this information to come up with a plan for the coming year . . . . I tend to experience stress when I'm faced with particular deadlines that I have to meet. I guess what compounds it is that there are other things that you have to do as well, so this is one additional thing over and above your everyday activities in the school . . . .

Another elementary school principal expressed a similar point of view when he explained:

> . . . there has been an increase in stress at certain times of the year because we are obligated to work the budget out with our staff. I have all the staff involved in the budget decisions, . . . so when you are having additional staff meetings on top of other concerns in a certain period of time in order to get your budget completed it tends to be more stressful. I think that I'm super sensitive to the fact that teachers have other commitments than just school . . . .

Secondly, principals explained that school-based budgeting contributes to their experiences of stress because the burden of responsibility for the budget has been shifted from Central Office to principals. They explained that under the previous system of centralized budgeting it was easier for them to blame Central Office for school-level problems with staffing, materials, and other budgetary items. With the school-based budgeting system, school principals are more visibly responsible for the operation of their schools. An elementary school principal explained:

> . . . the other thing [about school-based budgeting] that is super stressful is that the responsibility comes right back to the school directly. You don't have any excuses anymore and there are a million vested interest groups and you feel a moral obligation to try and respond . . . . Under the old system the buck didn't stop with principals. You could always blame Central Office. Now the

> buck stops here.

Another elementary school principal added:

> . . . in fact I think the increase in stress in recent times has been attributed to the fact that there has been more focus put on the schools being responsible. It was very nice before [school-based budgeting] to say to a teacher, no! . . . because they didn't approve it downtown [in Central Office]. Now you have to face the teacher yourself and that's a different ball park . . . now, more and more, you have to use yourself for the reasons for yea or nay.

A junior high school principal expressed a similar point of view as follows:

> It [school-based budgeting] has brought to the principalship a different role . . . the buck stops here and so I am unable to pass off a potential problem as being somebody else's responsibility whereas that was certainly the case previously. So more often now the principal has to answer the difficult questions . . . .

Nevertheless, it is still true that principals can blame Central Office for certain school level problems to the extent that the initial allocation of funds to schools by Central Office according to a formula is not sufficient to meet all the unique needs of particular schools. Furthermore, because principals have to design their budgets within certain externally imposed constraints that are defined by Provincial statutes, School Board policies, and collective agreements with employee organizations, it is also possible for principals to direct some blame for the inadequacies of their budgets on these externally imposed constraints.

Thirdly, principals explained that the process of school-based budgeting has increased the potential for conflict between staff and principal. An elementary-junior high school principal explained:

> The budget process becomes very personal here -- very personal when you are allocating monies . . . each person has his own little kingdom and you have to make sure that you make allocations equal or it becomes a highly contentious issue . . . .

An elementary school principal also explained:

> . . . teachers sometimes don't understand the budget process completely. They simply think there is money there whenever they want to spend it and it is a matter of deciding where the priorities are . . . . They want to restore certain positions and at the same time they are not willing to cut down on other things.

A composite high school principal added:

> School-based budgeting has created infighting . . . this has created stress. If I'm an English teacher and my budget is $5,000 and I see $10,000 being spent for student activities I become upset . . . .

Another elementary school principal explained:

> The reason school-based budgeting increases stress is because when we say we should reduce a particular service it is like saying to the person who provides the service that we don't like your work -- it becomes a personal conflict kind of thing.

In summary principals explained that school-based budgeting has reduced their experiences of stress because: (1) many constraints to school-level decision-making have been removed, (2) principals can exercise increased flexibility in the implementation of educational initiatives to meet the unique needs of their communities, and (3) the role of principal is less ambiguous. School-based budgeting has contributed to principals' experiences of stress because: (1) of the additional pressure this important deadline imposes during a normally demanding period of the school year, (2) the burden of responsibility for the budget has been transferred from Central Office to principals, and (3) it has increased the potential for conflicts between principals and staffs.

The One-Line Authority Structure

Prior to October, 1979, the Edmonton Public School Board Central Office was organized on a functional basis. Among the perceived disadvantages of the former structure was that principals were responsible to several assistant superintendents, directors, and supervisors. The new structure was designed to: (1) provide a more direct channel of communication between principals and Central Office administrators; (2) improve decision-making and the ability of Central Office to respond to the unique needs of schools; (3) clarify the respective roles of Central Office administrators, principals, and school staffs in the decision-making process; and (4) facilitate decentralized decision-making through school-based budgeting. Under the new structure each organizational member has only one immediate superordinate. The Central Office has been restructured to include six associate superintendents who are each responsible for about 25 to 35 schools in one of six zones of the Edmonton Public School District. School principals thus report directly to one person -- their respective associate superintendent -- who reports in turn directly to the Superintendent of the Edmonton Public School District.

Solicited and unsolicited responses from principals reported in Table 6.6 reveal that the one-line authority structure both reduces and contributes to principals' experiences of overall work-related stress. However, an inspection of the frequency distribution of responses reported in Table 6.6 also reveals that the largest proportion of principals -- 47 percent -- identified the one-line authority structure as reducing their experiences of work-related stress, whereas a small proportion of principals -- 9 percent -- identified the one-line authority structure as contributing to their experiences of stress. Thirty-one percent of principals identified some aspects of the one-line authority structure as contributing to stress and other aspects as reducing stress. Thirteen percent of principals felt that the one-line

Table 6.6

Distribution of Solicited and Unsolicited Responses to the Impact of the One-Line Authority Structure Upon Principals' Experiences of Overall Work-Related Stress

Impact of the One-Line Authority Structure Upon Stress	Spontaneous Responses	Solicited Responses	Total Responses f	Total Responses %
Reduces Stress	5[a]	10	15	47
Reduces and Contributes to Stress	2[b]	8	10	31
Contributes to Stress	0	3[c]	3	9
No Effect on Stress	0	4	4	13
Total Responses	7	25	32[d]	100

[a] This means that 5 principals *spontaneously* identified aspects of the one-line authority structure as reducing stress.

[b] This means that 2 principals *spontaneously* identified some aspects of the one-line authority structure as reducing stress and other aspects as contributing to stress.

[c] This means that 3 principals identified aspects of the one-line authority structure as contributing to stress in response to the question: *What effect, if any, does the one-line authority structure have upon your experience of work-related stress?*

[d] Four of the 36 principals interviewed did not provide responses to the impact of the one-line authority structure upon their experiences of work-related stress.

authority structure had no effect upon their experiences of stress.

Insights provided by principals into aspects of the one-line authority structure that reduce principals' experiences of overall work-related stress are examined in the following sub-section of the chapter.

Aspects of the one-line authority structure that reduce overall work-related stress. Principals explained that the new one-line authority structure reduced their experiences of stress because it reduced ambiguity in the role of principal in general and in the relationship between principal and Central Office in regard to decision-making in particular. An elementary school principal provided the following comparison of decision-making in the former structure with decision-making in the new one-line authority structure:

> . . . it took you about four years in this job to learn what the old structure was for one thing . . . . I remember working as a beginning principal and often calling a neighboring principal and saying that I have this problem and who do I phone? . . . now working with the one area superintendent . . . you know exactly what you can go to him with and he is there within an hour if you need him or he is on top of it from his office . . . .

Another elementary school principal explained that prior to the introduction of the one-line authority structure he had conflicts with Central Office administrators as a consequence of the ambiguous relationships between Central Office and principals with regard to decision-making and policy implementation. With the introduction of the one-line authority structure the role of principal was more clearly specified and similarly, the relationship between principals and Central Office was clarified. This experienced elementary school principal provided the following additional insights:

> Before [the implementation of the one-line authority structure], I had confrontations with superiors over things that I had done. Trouble was there were so damn many of them. I never knew who I was supposed to be talking to and whether this guy really had any authority. I didn't know what the guidelines were anyway. A classic case -- a guy phones me up from Central Office and says, Oh! you've pulled a no! no! here -- like what? What did I do? And he says, You did this and this, and you violated policy number such and such of the blue book . . . that used to be hard to cope with . . . we don't have that sort of stress anymore.

Principals also explained that the one-line authority structure has reduced their experiences of stress because administrative procedures for dealing with Central Office have been simplified. A composite high school principal commented that, ". . . it [the one-line authority structure] has got some to the red tape out of the way." And an elementary school principal added:

> . . . I find it much easier and less stressful getting things done, . . . you don't have to phone twenty different departments, you have just one person [the associate superintendent].

Another elementary school principal commented that:

> . . . the new structure has reduced the number of people who you have to sort of buck heads with or get decisions from. Now we funnel everything through our associate superintendent. From the point of view of efficiency and stress it's better this way. You don't have to go to staffing department or facilities or curriculum and all the different areas to get a decision on some damn thing. And sometimes it used to be when you wanted one thing you had to get a decision from three or four people on that one thing.

Insights provided by principals into aspects of the one-line authority structure that contribute to principals' experiences of overall work-related stress are examined in the following sub-section of the chapter.

Aspects of the one-line authority structure that contribute to overall work-related stress. Conflict and interpersonal incompatibility between principal and associate superintendent were identified by five principals as a potentially stressful aspect of the one-line authority structure. Furthermore, eight principals explained that even though their role within the one-line authority structure was clearly specified and channels for communication and decision-making were less ambiguous than in the previous structure, there was still a perceived gap in communications between principals and associate superintendents. Principals felt that associate superintendents were too preoccupied with administrative and policy-making concerns to have the time to visit each school within their zone several times per year to gain an optimum level of knowledge of the unique needs of these schools. The following comment by an elementary school principal is typical of the comments of the eight principals:

> . . . I envisaged that the relationship between principal and associate superintendent would be closer with the associate being more aware of what's happening in this school . . . but they are all doing administrative work and policy, and they don't have time to get into schools . . . they are seldom here . . . . They could avoid a lot of problems that are happening if they were more aware of what was happening at the school and within the community . . . . I would like him [the associate superintendent] to come out and sit down and spend some time in the school . . . .

In summary, principals explained that the one-line authority structure has reduced their experiences of stress because: (1) ambiguity in the relationship between principal and Central Office in regard to decision-making has been reduced, (2) the role and responsibilities of principals in the Edmonton Public School System are more clearly specified, and (3) the new structure has reduced Central Office "red tape." A poor work relationship between principal and associate superintendent was identified as a potentially stressful aspect of the one-line authority structure.

The Involvement of Principals in the Selection of Personnel

A practice of centralized screening by personnel supervisors of applicants for employment by the Edmonton Public School Board and decentralized selection by principals among "suitably screened" applicants for designated positions in schools evolved in keeping with the reorganization of the Edmonton Public School Board Administration into a one-line authority structure and a more decentralized system of administration. Under the new structure principals are held responsible for the total operation of their schools. Therefore, it has been accepted by the Edmonton Public School Board Administration that principals should have the right to select their professional and custodial staffs. Principals were granted the right to select among applicants for employment or transfer using whatever criteria may be deemed appropriate by principals for the local needs of the position and school. The involvement of principals in the selection process is restricted to the extent that on occasion associate superintendents have to reassign tenured teachers who have been declared surplus to the needs of a particular school.

The frequency distribution of solicited and unsolicited responses to the impact of school-based selection of personnel by principals upon principals' experiences of overall work-related stress are reported in Table 6.7. A large proportion of principals -- 40 percent -- felt that school-based selection of personnel by principals had no effect upon their experiences of stress; however, an almost equally large proportion of principals -- 37 percent -- identified school-based selection of personnel by principals as reducing stress. It is noteworthy that the seven principals who *spontaneously* identified

Table 6.7

Distribution of Solicited and Unsolicited Responses to the Impact of School-Based Selection of Personnel by Principals Upon Principals' Experiences of Overall Work-Related Stress

Impact of School-Based Selection of Personnel By Principals Upon Stress	Spontaneous Responses	Solicited Responses	Total Responses f	Total Responses %
Reduces Stress	7[a]	4	11	37
Reduces and Contributes to Stress	0	5[b]	5	17
Contributes to Stress	0	2[c]	2	6
No Effect on Stress	0	12	12	40
Total Responses	7	23	30[d]	100

[a] This means that 7 principals *spontaneously* identified aspects of school-based selection of personnel by principals as reducing stress.

[b] This means that 5 principals identified aspects of school-based selection of personnel by principals as reducing stress and other aspects as contributing to stress in response to the question: *What effect, if any, does your involvement in the selection of personnel for appointment or transfer to your school have upon your experience of work-related stress?*

[c] This means that 2 principals identified aspects of school-based selection of personnel by principals as contributing to stress in response to the question: *What effect, if any, does your involvement in the selection of personnel for appointment or transfer to your school have upon your experience of work-related stress?*

[d] Six of the 36 principals interviewed did not provide responses to the impact of school-based selection of personnel by principals upon their experiences of work-related stress.

school-based selection of personnel by principals as reducing stress held principalships of relatively new schools in which they had selected the entire staff. Seventeen percent of principals identified some aspects of school-based selection of personnel by principals as reducing stress and other aspects as contributing to stress. A very small proportion of principals -- 6 percent -- identified only aspects of school-based selection of personnel by principals as contributing to stress.

Insights provided by principals into aspects of school-based selection of personnel by principals that reduce principals' experiences of overall work-related stress are examined in the following sub-section of the chapter.

The selection of personnel by principals as a factor reducing overall work-related stress. Eleven principals explained that by being involved in the selection of staff for their schools they can increase the likelihood that their staffs are (1) philosophically congruent, (2) suited to the local needs of their schools, (3) supportive of the school program, (4) dedicated and competent, (5) cohesive work groups, and (6) understanding and supportive of principals' expectations. Hence, the potential for stressful conflicts among staff and between principal and staff has been reduced.

The principal of a relatively new elementary school explained that a major factor contributing to a reduction of his experience of stress is that:

> . . . the staff that are here are my staff. I hand picked all of them. I tried to pick people who are very child oriented and have the same philosophical perspective as myself -- people oriented people . . . . We are very comfortable with one another, . . . and

> we have grown together as a group . . . it makes for an open atmosphere. The big thing is that these teachers are the ones I picked and that I wanted to work with . . . and this creates a cohesive staff.

A junior high school principal expressed the following similar point of view:

> A large number of staff were personally selected when I first opened this school. And as we've grown [in student enrollments] I have had a fair amount of freedom in choosing additional staff. They know what I think, . . . they know my expectations, and I know very much about them . . . . We are a very compatible staff . . . .

Another elementary school principal commented:

> . . . I welcome the chance to interview [applicants for appointment] . . . I like the interview because I find out what a teacher's philosophy is, how they feel about certain things, . . . whether they're going to fit into the staff personality wise. Those are important factors. In the long run, I could say that that decreases stress.

Insights provided by principals into aspects of school-based selection of personnel by principals that contribute to principals' experiences of overall work-related stress are examined in the following sub-section of the chapter.

The selection of personnel by principals as a factor contributing to overall work-related stress. Four principals explained that under the former system of centralized appointment and assignment of personnel to schools, responsibility for inappropriate appointments rested with Central Office. To a large extent this responsibility now rests with principals. Furthermore, three other principals indicated that they sometimes found selecting teachers a stressful task because of the difficulties they experienced in determining the most suitable applicant. An elementary school principal explained further:

> . . . I have exercized the privilege [right to select personnel] already. I think it creates stress. It's a difficult job to do.

> You want to do the very best job you can and I don't know whether we [principals] have all the skills that we should have in order to choose personnel. I know what I want in a good classroom teacher but I don't know whether I can really size that person up when they are sitting across the desk from me.

Another elementary school principal also explained:

> I have made mistakes in staff selection . . . . It's tough to make a decision. One questions oneself a lot. I would like to know more and have more input than just a half-hour interview with a teacher . . . . Once you have made a decision you have to live with it and you are now responsible. If you make a mistake it can be stressful having to live with that mistake from then on.

It should be pointed out that five principals commented that they felt that they needed professional development to improve their interviewing techniques for personnel selection.

SUMMARY

Data, findings, and discussions in relation to the third objective of the study were presented in this chapter. This objective was to identify, explore, and describe work-related situations, coping behaviors used by principals, and other factors associated with principals' experiences of overall work-related stress. Both quantitative questionnaire data and qualitative interview data were analyzed. *A priori* analysis categories for the interview data were not employed; rather the data were explored with the purpose of (1) identifying factors associated with principals' experiences of overall work-related stress and (2) developing more complete, holistic, and contextual portrayals of these factors.

The greatest proportion of principals -- 88 percent -- reported the role of principal as either "mildly" or "moderately stressful." A small proportion of the principals -- 4 percent -- reported the role of principal as "not stressful" and only 8 percent of the principals reported the role of principal as "very stressful." Three principals who reported the role of principal as "mildly stressful" and five principals who reported the role of principal as "moderately stressful" provided unsolicited comments during the semi-structured interviews indicating that they were experiencing on average what could be considered, in Selye's (1974) terms, a necessary, desirable, and reasonable level of stress. Comments were neither solicited from, nor provided by, the other 28 principals interviewed regarding this proposition.

An analysis to determine which work-related situations in combination are the best predictors of principals' perceptions of overall work-related stress was reported. The best predictor of overall work-related stress is: "Resolving parent-teacher conflicts and misunderstandings." This work-related situation in combination with the two next best predictors -- "Being too rushed to complete tasks to your satisfaction" and "Resolving interpersonal conflicts among staff" account for 42.3 percent of the variance in principals' perceptions of overall work-related stress.

An analysis to determine which coping behaviors in combination are the best predictors of principals' perceptions of overall work-related stress was also reported. The best predictor of overall work-related stress is: "Use the school system's rules and procedures as a buffer against community, parental, or other stressful problems." It was reported that principals' perceptions of overall work-related stress tend to be: (1) higher, if principals tend to use the school system's rules and procedures as a buffer against community, parental, or other stressful problems; (2) higher, if principals tend to avoid discussing stressful work problems with their families or friends; and (3) lower, if principals tend to consider a range of plans and then choose among the options.

Principals' perceptions of overall work-related stress were not significantly associated with: (1) principals' Type A behavior scores, (2) the size of principals' schools, (3) the experience of principals, (4) the degree of cohesiveness of principals' staffs, and (5) the level of staff support for principals. Junior high school principals had significantly higher mean scores on the measure of overall work-related stress than composite high school principals.

Principals were asked to identify and describe aspects of their schools, their administrative styles, or any other factors that reduce their experiences of overall work-related stress. The following five factors were identified by principals as reducing their experiences of stress: (1) the availability of sources of support; (2) mutually supportive relationships with staff; (3) the establishment of open communication patterns with staff and the participation of staff in decision-making; (4) personal factors -- a human relations approach to administration, maintaining a positive perspective of people and situations, being flexible, maintaining a "low-key" approach, having the ability to keep the job in perspective, having the ability to establish priorities, and participating in recreational activities; and (5) school and contextual factors -- small schools, academically oriented and well-behaved students, and having an accepting, undemanding and supportive school community.

Principals were also asked to identify and describe aspects of their schools, their administrative styles, or any other factors that contribute to their experiences of overall work-related stress. The following four factors were identified by principals as contributing to their experiences of stress: (1) the isolation of not having an assistant principal; (2) entrenched, uncohesive, and unsupportive staffs; (3) personal factors -- having low drive and energy, being reluctant to share problems or seek support, being reluctant to compliment staff, and taking the job too seriously and personally; and (4) school and contextual factors -- the early adolescent nature of junior high school students; the multitude of tasks faced by a composite high school principal; communities characterized as having a diverse cultural mix, a broad socio-economic profile, and a predominance of families in which both parents work; and high socio-economic communities in which parents are well educated, very influential, and demanding.

Three relatively recent changes in the administration of schools in the Edmonton Public School System -- school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals -- were identified by principals as both reducing and contributing to their experiences of overall work-related stress. However, a majority of principals -- 53 percent -- identified school-based budgeting as reducing their experiences of stress, whereas a much smaller proportion of principals -- 9 percent -- identified school-based budgeting as contributing to their experiences of stress. Similarly, a large proportion of principals -- 47 percent -- identified the one-line authority structure as reducing stress, whereas a small proportion -- 9 percent -- identified it as contributing to their experiences of stress.

A large proportion of principals -- 40 percent -- felt that school-based selection of personnel by principals had no effect upon their experiences of stress; however, a similar proportion of principals -- 37 percent -- identified school-based selection of personnel by principals as reducing stress. A very small proportion of principals -- 6 percent -- identified only aspects of school-based selection of personnel by principals as contributing to stress.

CHAPTER 7

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This final chapter is divided into five major sections: (1) an overview of the study, (2) a summary of the findings, (3) a discussion of the findings in relation to the literature and study context, (4) conclusions, and (5) a discussion of the implications of the study for practice and future research.

SUMMARY OF THE STUDY

Purpose and Objectives of the Study

The purpose of the study was to identify, explore, and describe work-related situations, coping behaviors used by principals, and other factors associated with the variance in principals' experiences of overall work-related stress. To fulfill the study purpose it was necessary to satisfy the following objectives:

1. To identify and describe work-related sources of stress for a group of principals.

2. To identify and describe coping behaviors used by principals and to report principals' perceptions of the relative effectiveness of coping behaviors.

3. To identify, explore, and describe work-related situations, coping behaviors used by principals, and individual and contextual factors that either reduce or contribute to principals' experiences of overall work-related stress.

Justification for the Study

Fewer studies of school administrator stress have been reported in the literature than studies of teacher stress. Most of the reported studies of school administrator stress have been conducted in the United States. Actual sources of stress for school principals, strategies for coping with work-related stress, and factors associated with the variance in principals' experiences of work-related stress have not been identified in an Alberta context. This study identified and described sources of stress for a group of Alberta principals, coping behaviors used by these principals to deal with work-related stress, and individual and contextual factors associated with these principals' experiences of work-related stress. As such, this study builds on previous research and contributes information that was not available in the literature. Furthermore, the study provides Alberta-based data and findings that should (1) enable school principals to broaden their repertoires of stress coping strategies, (2) provide a basis for preservice and inservice stress education programs, and (3) be of value to educational administrators and school boards concerned with the formulation of school district policy to reduce experiences of stress by principals.

Conceptual Framework

The model of stress by Kyriacou and Sutcliffe (1978a) served as the conceptual framework for the study. According to this model actual stress occurs only if the individual perceives and appraises an imbalance between demands and the ability to cope under circumstances where failure has important consequences for the individual. The perception and appraisal process depends to some extent upon individual and contextual factors and the degree to which the individual successfully employs coping mechanisms. Hence, specific dimensions investigated in the study included perceived sources of work-related stress, coping behaviors used to deal with work-related stress, and individual and contextual factors associated with perceptions of overall work-related stress.

Respondents

The respondents in the study were 50 elementary, elementary-junior high, junior high, and composite high school principals from the Edmonton Public School District. Each of these principals volunteered to participate in the study after the purpose, design, time requirements, and benefits of the study were explained to them by the researcher.

Research Methodology

Quantitative questionnaire data and qualitative interview data were collected. The combination of quantitative and qualitative methodologies in the study served as the basis for triangulation in the sense described by Jick (1979:603); namely, to ". . . capture a more complete, holistic, and contextual portrayal of the unit(s) under study."

All 50 principals who agreed to participate in the study received and completed the questionnaire. The first 36 principals who agreed to participate in the study were also interviewed.

A semi-structured interview was used to provide principals with the opportunity (1) to identify and describe work-related situations that they had experienced as very or extremely stressful and to give reasons why these were so stressful, and (2) to identify and describe individual and contextual factors that either reduce or contribute to their experiences of overall work-related stress. The questionnaire served (1) to identify work-related sources of stress for principals and to report the frequency of occurrence of these work-related situations, (2) to identify coping behaviors used by principals in dealing with work-related stress and to report principals' assessments of the relative effectiveness of these coping behaviors, and (3) to provide data on individual characteristics and contextual factors.

Data analysis techniques reflected the descriptive and exploratory nature of the study. Descriptive statistical techniques such as means, standard deviations, and frequencies; and exploratory statistical techniques such as correlational analysis, stepwise multiple regression analysis, and factor analysis were employed for the analysis of quantitative questionnaire data. *A priori* analysis categories were not employed for the analysis of qualitative interview data. The qualitative data were explored with the purpose of identifying analysis categories directly from the data. The major objective of these analyses was to gain a more fully grounded understanding of (1) work-related situations that principals perceived as very or extremely stressful, and (2) factors that principals identified as reducing or contributing to their experiences of overall work-related stress.

SUMMARY OF THE FINDINGS

The three major objectives of the study were achieved through research directed at an examination of three major problems each of which included several related sub-problems. The problem statements were derived from the conceptual framework of the study and the review of the related literature. Each problem is re-stated below with a summary of the major related findings.

Research Problem 1: Work-Related Sources of Stress

> *To what extent have principals in the study group experienced stress associated with work-related situations?*

This problem was stated in the form of six specific sub-problems. The major findings related to each of these sub-problems are summarized below.

> *1.1. How frequently has each specified work-related situation occurred, and how stressful has each work-related situation been for principals when it has occurred?*

Principals reported *on average* most work-related situations listed in the questionnaire as "mildly" to "moderately stressful." However, the range in *individual* perceptions of stress of work-related situations extended from "not stressful" to at least "very stressful." For 24 of the 43 specified work-related situations *individual* perceptions of stress ranged from "not stressful" to "extremely stressful." Principals were essentially in agreement in their assessments of the frequency of occurrence of most work-related situations, though striking differences in the frequency with which some situations occurred were reported. These were situations involving insufficient time to complete tasks, to meet family commitments, and to stop work and relax during lunch hours.

> *1.2. What is the rank order of the specified work-related situations from the most stressful to least stressful?*

The four most stressful items describe situations in which principals have to deal with a teacher whose performance has been unsatisfactory, ineffectual, or incompetent. However, these situations occur rarely. Other stressful situations involve: (1) role overload, (2) the principal as mediator of interpersonal conflicts among staff or conflicts between parents and teachers, and (3) the principal contending with parental or staff demands and criticisms.

The ten least stressful work-related situations involve tasks and functions of the principalship that can be characterized as: (1) relatively routine, (2) expected or taken for granted as part of the normal role of a principal, and (3) relatively unambiguous.

1.3. What relationships exist between the frequency of occurrence of the specified work-related situations and principals' perceptions of the stress associated with these situations?

A significant negative Pearson correlation coefficient computed between the mean scores for "stress" and the mean scores for "frequency of occurrence" of each work-related situation indicated that the more stressful work-related situations tend to occur less frequently. Conversely, the less stressful work-related situations tend to occur more frequently in the principalship. Only one work-related situation -- "Being too rushed to complete tasks to your satisfaction" -- was considered worthy of some concern because it was rated on average as "moderately stressful" and was assessed as occurring on average "about 1-3 times per month." Work-related situations which are more stressful than this situation occur much less frequently and situations which occur more frequently than this source of stress are much less stressful.

1.4. What descriptive factors can be extracted from a factor analysis of principals' perceptions of stress associated with each specified work-related situation?

An exploratory factor analysis of principals' responses on the "stress" scale of the 43 work-related situations revealed three factors accounting for 51.1 percent of the variance. These were labelled: Factor 1 -- "Role overload, conflict, and ambiguity." Factor 2 -- "Establishing consensus and gaining support," and Factor 3 -- "Interacting with personnel whose performance was unsatisfactory." Factor mean scores for "stress" revealed that "Role overload, conflict, and ambiguity" and "Establishing consensus and gaining support" were perceived by principals as low stress factors. "Interacting with personnel whose performance was unsatisfactory" was perceived as the most stressful of the three factors. However, the mean score for "frequency of occurrence" of Factor 3 indicates that this factor occurs rarely.

1.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and principals' perceptions of the stress associated with work-related factors on the other?

The overall Type A behavior scores and the three factor scores of Type A behavior of principals were not associated with principals' perceptions of stress as measured by the three work-related factors. Principals who had served longer in their present schools tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory and in dealing with situations that involved role overload, conflict, and ambiguity. Furthermore, principals who had more years of experience in the principalship also tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory.

1.6. What work-related situations are identified and described by principals as very or extremely stressful and why are these situations so stressful?

The foremost sources of stress identified during semi-structured interviews were consistent with important sources of stress identified by questionnaire. A source of stress was considered "foremost" in principals' minds if it was identified and described as very or extremely stressful by 15 percent of those interviewed. These foremost sources of stress were: (1) recommending the termination of employment or transfer of a teacher, (2) role overload, (3) resolving parent-child-teacher conflicts and misunderstandings, (4) parental demands and concerns, (5) student discipline, (6) resolving conflicts and misunderstandings between staff, (7) reducing surplus staff, and (8) confronting or reprimanding personnel. Insights provided by principals into the stressful aspects of these foremost sources of stress were examined in the body of the dissertation.

Research Problem 2: Coping Behaviors and Effectiveness

To what extent do principals in the study group employ certain coping behaviors, and what are principals' assessments of the relative effectiveness of these coping behaviors?

This problem was stated in the form of five specific sub-problems. The major findings related to each of these sub-problems are summarized below.

2.1. How frequently has each specified coping behavior been used by principals, and what are the assessments of the relative effectiveness of coping behaviors by principals who have used these coping behaviors?

Assessments by principals of the effectiveness of 18 coping behaviors listed in the questionnaire ranged from "not effective" to "highly effective." For the remaining six specified coping behaviors assessments ranged from "slightly effective" to "highly effective." Considerable variations in the frequency of use of most behaviors were reported by principals. However, more than half of the principals were within two response categories of each other in their estimates of the frequency with which they used any particular coping behavior.

2.2. What is the rank order of the specified coping behaviors from the most effective to least effective?

Principals reported that making a concerted effort to enjoy themselves with some pleasurable activity after work is one of the most effective ways of coping with stress. In addition, principals assessed on average as "very effective" the following coping behaviors: "Seek advice and support from your assistant principal(s)," "Seek additional information about the situation before making the decision," and "Consider a range of plans, then choose among the options." Five of the six least effective behaviors could be described as avoidance behaviors.

2.3. What relationships exist between the frequency of use by principals of the specified coping behaviors and principals' assessments of the relative effectiveness of these coping behaviors?

A significant positive Pearson correlation coefficient computed between the mean scores for "effectiveness" and the mean scores for "frequency of use" of each coping behavior confirmed what common sense would have predicted, namely that there is a tendency for principals to use more frequently coping behaviors that are assessed as more effective.

2.4. What descriptive factors can be extracted from a factor analysis of principals' assessments of the relative effectiveness of each specified coping behavior?

An exploratory factor analysis of principals' responses on the "effectiveness" scale of the 24 coping behaviors revealed three factors accounting for 41.5 percent of the variance. These were labelled: Factor 1 -- "Task-oriented behaviors," Factor 2 -- "Preventive behaviors," and Factor 3 -- "Avoidance behaviors." Each of four items related to "seeking social support" loaded positively and uniquely on one of the above three factors. Factor mean scores for "effectiveness" reveal that avoidance behaviors were assessed by principals as the least effective. Task-oriented and preventive behaviors were assessed on average as "moderately" to "very effective."

> *2.5. What relationships exist between Type A behavior scores and experience of principals on the one hand and the frequency of use by principals of coping factors on the other?*

The overall Type A behavior scores of principals were not associated with the frequency of use by principals of each of the three coping factors. Principals who scored higher on Factor S (Speed and Impatience) tended to use avoidance behaviors more frequently. Principals who scored higher on Factor J (Job Involvement) tended to use task-oriented behaviors and preventive behaviors more frequently. Principals who were hard-driving and competitive tended to use task-oriented behaviors more frequently. More experienced principals tended to use preventive behaviors less frequently.

Research Problem 3: Overall Work-Related Stress and Associated Factors

> *What factors are associated with principals' experiences of overall work-related stress?*

This problem was stated in the form of seven specific sub-problems. The major findings related to each of these sub-problems are summarized below.

> *3.1. To what extent do principals experience work-related stress?*

A large proportion of principals -- 58 percent -- perceived the role of principal as "moderately stressful." Only 8 percent of the respondents reported the role of principal as "very stressful" and none of the respondents reported the role of principal as "extremely stressful." A small proportion of principals -- 4 percent -- perceived the role of principal as "not stressful." The greatest proportion of principals -- 88 percent -- reported the role of principal as either "mildly" or "moderately stressful."

3.2. Which of the work-related situations are the best predictors of principals' perceptions of overall work-related stress?

The best predictor of overall work-related stress is, "Resolving parent-teacher conflicts and misunderstandings." This source of stress accounted for 25.6 percent of the variance in overall work-related stress. The best predictor in combination with the two next best predictors -- "Being too rushed to complete tasks to your satisfaction" and "Resolving interpersonal conflicts among staff" -- accounted for 42.3 percent of the variance in overall work-related stress.

3.3. Which of the coping behaviors used by principals are the best predictors of principals' perceptions of overall work-related stress?

The coping behavior that is the best predictor of overall work-related stress is, "Use the school system's rules and procedures as a buffer against community, parental or other stressful problems." This coping behavior in combination with the two next best predictors -- "Avoid discussing stressful work problems with your family or friends" and "Consider a range of plans, then choose among the options" -- accounted for 41.1 percent of the variance in overall work-related stress. When the effects of other predictors are held constant, principals' perceptions of overall work-related stress tend to be

(1) higher, if principals tend to use the school system's rules and procedures as a buffer against community, parental or other stressful problems; (2) higher, if principals tend to avoid discussing stressful work problems with their family or friends; and (3) lower, if principals tend to consider a range of plans and then choose among the options.

3.4. To what extent are differences in principals' perceptions of overall work-related stress associated with:

- *3.4.1. -Individual factors: Type A behavior, Factor S (Speed and Impatience), Factor J (Job Involvement), and Factor H (Hard-Driving and Competitive)?*
- *3.4.2. -Structural factors: type of school and size of school?*
- *3.4.3. -Professional factors: experience in present school and experience in total?*
- *3.4.4. -Contextual factors: staff cohesiveness and level of staff support for the principal?*

Principals' perceptions of overall work-related stress were not significantly associated with: (1) Type A behavior scores of principals, (2) the size of the principals' schools, (3) the experience of principals, (4) the degree of cohesiveness of the school staff, and (5) the level of staff support for the principals. Junior high school principals had significantly higher mean scores on the measure of overall work-related stress than composite high school principals.

3.5. What individual and contextual factors are identified by principals as having reduced their experiences of overall work-related stress?

The following five factors were identified by principals during interviews as reducing their experiences of stress:

1. the availability of sources of support -- dedicated, cohesive, and highly supportive staffs; capable and supportive assistant principals; other principal colleagues; spouses; and highly supportive associate superintendents;

2. mutually supportive relationships with staff;

3. the establishment of open communication patterns with staff and their participation in decision-making;

4. personal factors -- maintaining a human relations approach to administration, maintaining a positive perspective of people and situations, adopting a flexible attitude and approach to administration, maintaining a "low-key" approach, having the ability to keep the job in perspective, having the ability to establish priorities, and participating in recreational activities; and

5. school and contextual factors -- smaller schools in which communication patterns are relatively informal, where conflicts and problems occur infrequently, and where facilities are more than adequate; academically oriented and well-behaved students; and an accepting, undemanding, and supportive school community.

3.6. What individual and contextual factors are identified by principals as having contributed to their experiences of overall work-related stress?

The following four factors were identified by principals during interviews as contributing to their experiences of stress:

1. the isolation of not having an assistant principal;

2. entrenched, uncohesive, and unsupportive staffs;

3. personal factors -- having low drive and energy; being reluctant to share problems or seek support; experiencing personal difficulty in complimenting and rewarding staff for their achievements; and taking the responsibilities of the job, failings of other people, and conflicts with staff too seriously and personally; and

4. school and contextual factors -- the early adolescent nature of junior high school students; the multitude of tasks faced by a composite high school principal; a community characterized as having a

diverse cultural mix, a broad socio-economic profile, and a predominance of families in which both parents work; and a high socio-economic community in which parents are well educated, very influential and demanding.

3.7. What Edmonton Public School System factors are identified by principals as being associated with their experiences of overall work-related stress?

Three relatively recent changes in the administration of schools in the Edmonton Public School System -- school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals -- were identified by principals as both reducing and contributing to their experiences of overall work-related stress. However, a majority of principals -- 53 percent -- identified school-based budgeting as reducing their experiences of stress, whereas a much smaller proportion of principals -- 9 percent -- identified school-based budgeting as contributing to their experiences of stress. Similarly, a large proportion of principals -- 47 percent -- identified the one-line authority structure as reducing stress, whereas a small proportion -- 9 percent -- identified it as contributing to stress. A large proportion of principals -- 40 percent -- felt that school-based selection of personnel by principals had no effect upon their experiences of stress; however, a similar proportion of principals -- 37 percent -- identified aspects of school-based selection of personnel by principals as reducing stress. A very small proportion of principals -- 6 percent -- identified school-based selection of personnel by principals as contributing to stress.

The study revealed that school-based budgeting reduces principals' experiences of stress because: (1) many constraints to decision-making have been removed, (2) principals can exercise increased flexibility in the implementation of educational initiatives, and (3) it has reduced ambiguity in the role of the principal. School-based budgeting contributes to principals' experiences of stress because: (1) it places additional time demands on principals and staffs, (2) principals are more visibly accountable for the total operation of their schools, and (3) the potential for conflicts between principals and staffs has increased.

The study findings also revealed that the one-line authority structure reduces principals' experiences of stress because: (1) it has reduced ambiguity in the relationship between principals and Central Office regarding decision-making, (2) the role and responsibilities of principals in the Edmonton Public School System are more clearly specified, and (3) it has reduced Central Office "red tape." A poor work relationship between principal and associate superintendent was identified as a potentially stressful aspect of the one-line authority structure.

Finally school-based selection of staff by principals was identified as reducing the potential for stressful conflicts among staff and between principal and staff. Principal involvement in the selection of personnel increases the likelihood that school staff are: (1) philosophically congruent, (2) suited to the local needs of their schools, (3) supportive of the school program, (4) dedicated and competent, (5) cohesive work groups, and (6) understanding and supportive of principals' expectations. Principals sometimes find selecting teachers a stressful task because of the difficulties they experience in determining the most suitable applicant.

DISCUSSION OF THE FINDINGS IN RELATION TO THE LITERATURE AND STUDY CONTEXT

In the following four sub-sections, work-related situations, coping behaviors used by principals, and other factors identified and described by principals as reducing or contributing to their experiences of overall work-related stress are examined in relation to the literature and study context.

Work-Related Situations

It was noted previously that the greatest proportion of principals reported the role of principal as "mildly" to "moderately stressful." Principals' perceptions of stress of each of the 43 work-related situations provided in the questionnaire were consistent with their perceptions of overall work-related stress in the principalship to the following extent: (1) Foremost sources of stress for principals -- interacting with personnel whose performance was unsatisfactory, resolving conflicts and misunderstandings between staff, resolving parent-child-teacher conflicts and misunderstandings, dealing with unreasonable or unfounded parental demands or criticisms, and reducing surplus staff -- generally occur relatively infrequently; and (2) work-related situations that are least stressful involve tasks and functions of the principalship that are relatively routine (occur more frequently than "about 1-3 times per month"). Hence, it seems reasonable to conclude that because very stressful work-related situations occur infrequently in the principalship, and because frequently occurring work-related situations are on average mildly to moderately stressful, principals' experiences of overall work-related stress are consistent with their average perceptions of stress associated with work-related situations.

The nature of specific work-related sources of stress for Edmonton public school principals warrants further discussion. In the review of literature presented in Chapter 2, role conflict and ambiguity were identified as potential sources of stress particularly for middle-level administrators and those occupying boundary-spanning positions. Specifically, Lipham and Hoeh (1974), Vetter (1976), Caldwell and Doremus (1978), Griffiths (1977), and Crowson and Porter-Gehrie (1980) described the principalship as a middle-level administrative position and a pivotal exchange point between teachers, students, parents, and the educational policy-making structure. These writers claim that because principals occupy middle-level administrative and boundary-spanning positions they are subject to a large number of role senders and, therefore, experience considerable role conflict and ambiguity. The findings of this study reveal that Edmonton public school principals experience role conflict and ambiguity relatively infrequently in their capacity as middle-level administrators in the Edmonton Public School System hierarchy and as spanners of the boundary between schools and Central Office. Specifically, principals reported the following work-related situations as occurring less frequently on average than "about 1-3 times per year": "Having unclear role specifications from the Board and Central Office," "Making decisions about issues over which there are no clear school district guidelines," "Having unclear guidelines as to your legal rights and authority," and "Being caught as 'the person in the middle' between conflicting demands from teachers and Central Office administrators." Principals attributed this diminished sense of role ambiguity to the new one-line authority structure. This structure provides a more direct channel of communication between principals and Central Office administrators and has clarified the respective roles of Central Office administrators, principals, and school staffs in the decision-making process. The introduction of school-based budgeting has also reduced ambiguity regarding the budgetary process.

The findings of this study reveal, however, that principals in their capacity as organizational representatives and guardians perform a delicate balancing function. While being sensitive to parental demands and concerns, principals must also protect the collective interests of their schools and the integrity of individual members of staff. Principals reported that resolving parent-child-teacher conflicts was a foremost source of stress. Such boundary-spanning conflicts are stressful for principals whenever they feel caught in the middle of these conflicts -- torn between supporting the teacher on the one hand and the parents on the other. Furthermore, principals also identified unreasonable and unfounded parental demands and criticisms as stressful. Hence, the findings of the study are consistent with the literature to the extent that the boundary-spanning function of the principalship (particularly as it pertains to the boundary between school and community) is a source of stress.

In the review of literature it was reported that several studies of school administrator stress have identified "interpersonal relationships and conflicts" as a major source of stress (Swent and Gmelch, 1977; Warner, 1980; Jankovic, 1981; Koff et al., 1981). From a study of elementary and secondary school principals in the United States, Koff et al. (1981) tentatively concluded that conflicts between administrators and teachers are perceived by administrators as most stressful. Items within this category of conflicts were listed by Koff et al. (1981:3,4) as: "forcing the resignation or dismissal of a teacher," "dealing with unsatisfactory performance of professional staff," "preparing for a teachers' strike," "refusal of a teacher to follow policies," and "forced staff reduction." The findings of this study are consistent with the above studies to the extent that principals reported as very stressful situations in which they had to confront or interact with staff whose performance they perceived as either unsatisfactory, ineffectual, or incompetent. In addition, principals reported the need to reduce the number of surplus staff as very stressful.

Stressful "issue" or "interactional" conflicts, as described by Ivancevich and Matteson (1980:128), between principals and their staffs were reported by principals to occur "rarely." A large proportion of principals interviewed identified mutually supportive relationships, open communication patterns, and participative decision-making structures which they had established in their schools as having reduced stressful conflicts with staff. Personal factors such as maintaining a human relations approach to administration, having a positive perspective of people and situations, and maintaining a flexible attitude and approach were identified by principals as reducing the potential for stressful interpersonal conflicts.

"Qualitative" role overload was defined in the literature as occurring when role senders hold legitimate and consistent work expectations of a role incumbent, however it is difficult for the focal person to complete the work within a given period of time. "Qualitative" role overload occurs when legitimate and consistent work demands require abilities, skills, and knowledge which are beyond those held by the role incumbent. No evidence of stress arising from qualitative role overload was found in the study. However, principals did report moderate stress from being too rushed to complete tasks to their satisfaction and from contending with time pressures to complete the budget by the required date. Findings from the qualitative data reveal that only a few principals identified the "sheer volume" of demands in the principalship as being very stressful. Most principals did not describe role overload as occurring continuously or uniformly throughout the school year. Rather, overload occurs periodically as a number of pressing problems require the simultaneous attention of the principal. Stressful overload also occurs during those periods of the year when "school level" demands, problems, and crises are more frequent and important deadlines, such as the preparation of the school budget document, are also pressing.

Coping Behaviors Used by Principals

Lazarus (1966, 1974) has maintained that two ways of coping with stress exist -- "direct-action processes" and "palliative activities." Direct-action coping techniques encompass all individual behaviors, whether effective or ineffective, that are directed by the individual to change the essential nature of the sources of stress. Palliative coping activities are aimed at changing an individual's appraisal of the stress associated with situations or demands. Pearlin and Schooler (1978) maintain that a third style of coping serves more to control stress after its emergence.

The findings of this study reveal that principals use task-oriented (i.e., direct-action) and palliative coping styles. Principals do not generally use the third type of coping style identified by Pearlin and Schooler (1978). More specifically, 82 percent of the principals reported that they "never" use relaxation techniques such as meditation, yoga, self-hypnosis, and biofeedback. Of those principals who use relaxation techniques, most use such techniques "rarely." This suggests that principals are relatively unfamiliar with the application of relaxation techniques.

The findings of the study also reveal that principals use coping techniques described as "preventive behaviors." Such behaviors serve to prevent potentially stressful problems, conflicts, and crises from occurring. This general style of coping was not included in Lazarus' (1966, 1974) or Pearlin and Schooler's (1978) conceptualizations of coping styles. The findings of the study reveal that principals use preventive behaviors almost as frequently as task-oriented behaviors. Furthermore, principals rated preventive behaviors almost as effective on average as task-oriented behaviors.

It was noted in the review of the literature that Kyriacou (1981) maintains that social support underlies both direct-action and palliative coping styles. According to Kyriacou (1981:58) social support provides individuals with the opportunity to receive advice from trusted colleagues about direct-action techniques. Furthermore, individuals can develop a more realistic perspective of conflicts and problems which have grown out of proportion by discussing these with colleagues. Social support also provides an outlet for tension that has developed. The factor analysis conducted in this study of coping behaviors provided support for Kyriacou's (1981) contention by revealing that "seeking social support" underlies task-oriented, preventive, and avoidance behaviors. The findings derived from qualitative data confirmed the importance of sources of support as a factor reducing principals' experiences of overall work-related stress. Sources of support were described by principals as: dedicated, cohesive, and highly supportive staffs, capable and supportive assistant principals, other principals, spouses, and highly supportive associate superintendents.

The findings of the study reveal that assistant principals are important sources of advice and support. Quantitative data analysis revealed that the second most effective coping behavior is, "Seek advice and support from your assistant principal." Qualitative interview data revealed that a major factor contributing to nine principals' experiences of overall work-related stress was the isolation of not having an assistant with whom they could discuss administrative problems. These were principals of "one-administrator" schools. Clearly, having a capable assistant principal with whom the principal can consult is an important factor in the reduction of principals' experiences of stress.

The reported frequencies with which principals use the 24 specified coping behaviors listed in the questionnaire are consistent with their perceptions of overall work-related stress. Specifically, principals use more frequently coping behaviors assessed as more effective, and use less frequently coping behaviors assessed as relatively low in effectiveness. Furthermore, the multiple regression analysis reported in Table 6.3 revealed that principals who tended to report higher levels of overall work-related stress tended to employ more frequently coping behaviors assessed as relatively low in effectiveness.

Overall Work-Related Stress and Associated Factors

The Type A behavior pattern has been implicated in the literature as an important determinant of perceptions of stress and coping responses to stress (Caplan and Jones, 1975; Howard et al., 1977; Marshall and Cooper, 1979; Pittner and Houston, 1980; Smith and Brehm, 1981). Support for the proposition that Type A behavior is a moderator of principals' perceptions of stress and coping responses to stress was not found in this study. Specifically, principals' perceptions of overall work-related stress and stress associated with work-related situations were not associated to any significant degree with their Type A behavior scores as measured by the Jenkins Activity Survey Instrument. Furthermore, Type A behavior scores of principals accounted for relatively little of the variance in the frequency of use by principals of coping behaviors.

It has been suggested in the literature that as principals gain more experience they perceive work-related situations to be less stressful and, moreover, that the early years of a principals' appointment to a school are particularly stressful because the principal lacks familiarity with the operation of that school. Contrary to these expectations, principals who had served longer in their present schools tended to perceive more stress while interacting with personnel whose performance they considered unsatisfactory and in dealing with situations that involved role overload, conflict, and ambiguity. An examination of the nature of these sources of stress suggested that the apparent inconsistency between the findings and literature may be attributed to the formation of closer professional and social ties between principals and staffs the longer principals remain at their present schools. Because relationships are closer, it may not be altogether surprising that principals perceived more stress, for instance, in having to confront a member of staff regarding that person's poor performance, and in resolving interpersonal conflicts among staff.

The findings of the study reveal, however, that the experience of principals, whether measured as "experience in total" or "experience in present school," was not associated with principals' perceptions of overall work-related stress. The apparent inconsistency between this finding and the above may be explainable in the following terms: Principals who served longer in their present schools perceived more stress to be associated with work-related situations that occur relatively infrequently; hence, the net effect of such work-related situations on their perceptions of overall work-related stress in the principalship is minimal.

Mutually supportive relationships between principals and their staffs were *spontaneously* identified by a large proportion -- 50 percent -- of the principals interviewed as an important factor contributing to a reduction in their experiences of overall work-related stress. However, a Pearson correlation coefficient computed between the measure of staff support for the principal (item 3 in Section A of the questionnaire) and principals' perceptions of overall stress ($r = -0.203$)

was not statistically significant. The findings derived from the qualitative interview data and quantitative questionnaire data though seemingly inconsistent are in fact consistent for the following reasons: It has already been noted that the greatest proportion of principals -- 88 percent -- reported the role of principal as either "mildly" or "moderately stressful." Clearly, the variation in perceptions of overall work-related stress among a large proportion of principals is relatively small. Principals' responses on the measure of staff support for the principal also vary very little. More specifically, 22 percent of the principals reported an "average" level of staff support, 40 percent of the principals reported an "above average" level of staff support, and the remaining 18 percent of principals reported a "high level of staff support." It is also pertinent that none of the principals reported the level of staff support as "below average." Hence, it is clear that the principals perceived their staffs as supportive. The statistically insignificant Pearson correlation coefficient is probably an outgrowth of the small variation among principals in their assessments of the level of staff support and in their perceptions of overall work-related stress.

Conceptual Framework of Factors Identified as Reducing or Contributing to Stress

Content analyses of the qualitative interview data revealed many factors as reducing or contributing to principals' experiences of overall work-related stress. These factors were conceptually classified as follows:

1. Individual factors describe personal orientations of principals to work in general and preferences for administrative styles

in particular. Individual factors can be reasonably manipulated, changed, or controlled by the principal.

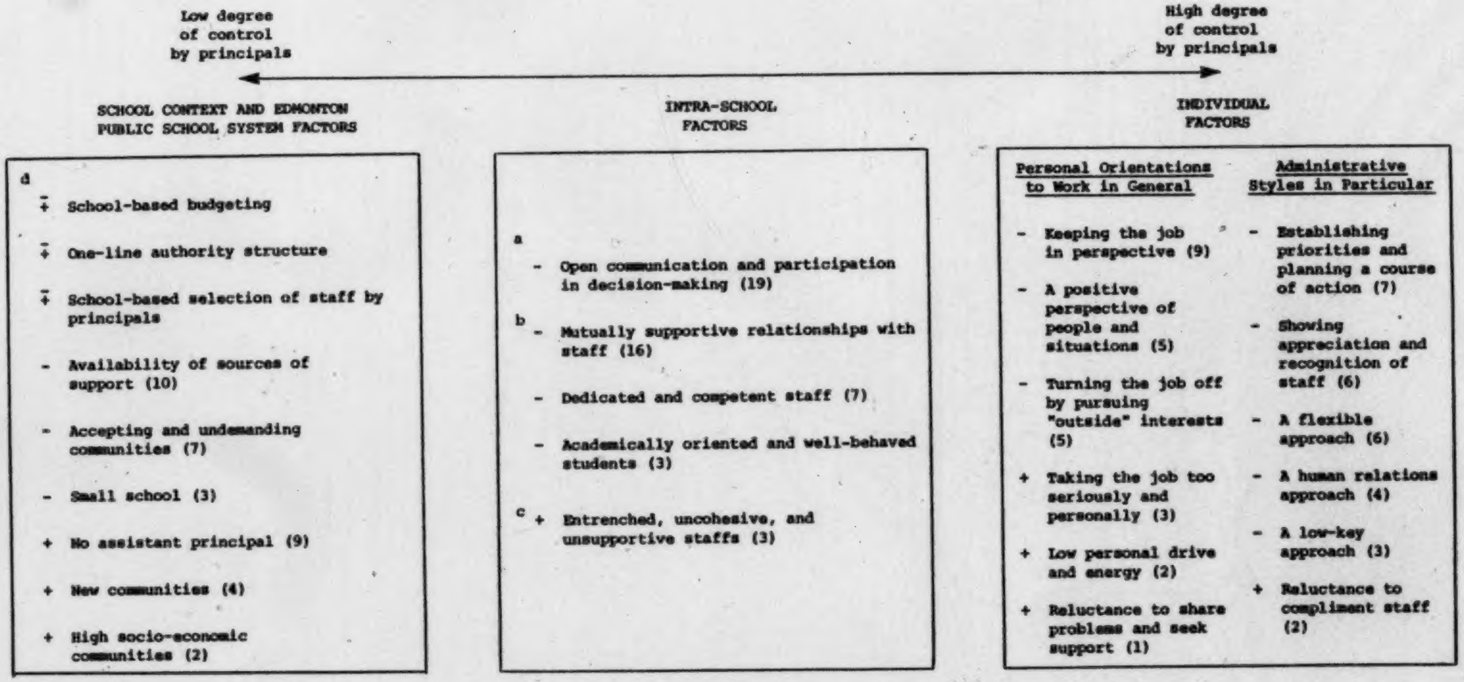
2. Intra-school factors describe relationships between principals and their staffs and students. These factors can be changed only in part by the transactions that principals engage in with their staffs and students.

3. School context and Edmonton Public School System factors are essentially predetermined within the school context or by the policies of the Edmonton Public School Board and its senior administrators. For example, the nature of a school's community is a factor that cannot be changed by a school principal. Similarly, school-based budgeting has been instituted by the School Board for use by all principals in accordance with certain guidelines.

Each factor identified as being associated in some manner with principals' experiences of work-related stress has been classified as either an individual factor, an intra-school factor, or a school context and Edmonton Public School System factor and presented in Figure 7.1. A negative (-) sign has been placed beside factors identified by principals as reducing stress and a positive (+) sign has been placed beside factors identified by principals as contributing to stress. The number of principals who spontaneously identified any particular factor has also been indicated beside the factor in Figure 7.1.

CONCLUSIONS

The following conclusions were drawn from the findings of the study and preceding discussion of the findings in relation to the literature and study context.


Low degree
of control
by principals
High degree
of control
by principals
SCHOOL CONTEXT AND EDMONTON PUBLIC SCHOOL SYSTEM FACTORS
INTRA-SCHOOL FACTORS
INDIVIDUAL FACTORS
d
∓ School-based budgeting
∓ One-line authority structure
∓ School-based selection of staff by principals
- Availability of sources of support (10)
- Accepting and undemanding communities (7)
- Small school (3)
+ No assistant principal (9)
+ New communities (4)
+ High socio-economic communities (2)
a
- Open communication and participation in decision-making (19)
b
- Mutually supportive relationships with staff (16)
- Dedicated and competent staff (7)
- Academically oriented and well-behaved students (3)
c
+ Entrenched, uncohesive, and unsupportive staffs (3)
Personal Orientations to Work in General
- Keeping the job in perspective (9)
- A positive perspective of people and situations (5)
- Turning the job off by pursuing "outside" interests (5)
+ Taking the job too seriously and personally (3)
+ Low personal drive and energy (2)
+ Reluctance to share problems and seek support (1)
Administrative Styles in Particular
- Establishing priorities and planning a course of action (7)
- Showing appreciation and recognition of staff (6)
- A flexible approach (6)
- A human relations approach (4)
- A low-key approach (3)
+ Reluctance to compliment staff (2)

[a] Means that "Open communication and participation in decision-making" was *spontaneously* identified by 19 principals as *reducing* experiences of overall work-related stress.

[b] Means that "Mutually supportive relationships with staff" was *spontaneously* identified by 16 principals as *reducing* experiences of overall work-related stress.

[c] Means that "Entrenched, uncohesive, and unsupportive staffs" was *spontaneously* identified by 3 principals as *contributing* to experiences of overall work-related stress.

[d] Means that some aspects of "School-based budgeting" were identified as *reducing* stress and other aspects were identified as *contributing to* stress.

Figure 7.1. Conceptual Framework of Factors Identified as Reducing or Contributing to Principals' Experiences of Overall Work-Related Stress.

1. The majority of Edmonton public school principals were experiencing on average a mild to moderate level of work-related stress. Such experiences of stress can be broadly interpreted as necessary, desirable, and reasonable. A very small proportion of the principals were experiencing on average a high level of work-related stress.

2. Work-related situations identified and described by principals as most stressful -- dealing with unsatisfactory, ineffectual, or incompetent members of staff; resolving interpersonal conflicts among staff; resolving parent-child-teacher conflicts and misunderstandings; dealing with unreasonable parental demands or criticisms; dealing with severe student disciplinary matters; and reducing the number of surplus staff -- occur relatively infrequently. The least stressful work-related situations involve the principal in tasks that are relatively routine, expected, and unambiguous.

3. Principals use task-oriented, preventive, and avoidance behaviors for dealing with work-related stress. Avoidance behaviors are considered by principals the least effective and used least frequently of all the coping styles. Task-oriented behaviors are considered the most effective and used most frequently of all coping styles.

4. Sources of social support such as dedicated, cohesive, and highly supportive staffs; capable and supportive assistant principals; other principal colleagues; and highly supportive associate superintendents play an important role in the general reduction of principals' experiences of work-related stress.

5. Principals who do not have an assistant principal -- these are principals of "one-administrator" schools -- are without an

important school-based source of advice and support.

6. Factors associated with the variance in principals' experiences of overall work-related stress can be conceptually categorized as individual factors, intra-school factors, and school context factors. Principals have a high degree of personal control over individual factors, partial influence over intra-school factors, and a low level of control over the school context and system level factors.

7. Aspects of each of three recently implemented changes in the administration of Edmonton public schools -- school-based budgeting, the one-line authority structure, and school-based selection of personnel by principals -- contribute to some principals' experiences of work-related stress while other aspects of each factor reduce some principals' experiences of work-related stress. However, each of these school system factors has the net effect of reducing a considerable proportion of principals' experiences of stress, while each factor also has the net effect of contributing to a comparatively small proportion of principals' experiences of stress.

IMPLICATIONS

Implications of the study for school boards, educational administrators, and researchers interested in the effectiveness of school administration and the long-term well-being of school principals are discussed in this section of the chapter.

Implications for Educational Administrators and School Boards

Factors identified and described by principals as either reducing or contributing to principals' experiences of work-related stress were conceptually categorized as individual factors, intra-school factors, and school context and Edmonton Public School System factors. Personal orientations of principals to work in general and choices of administrative styles in particular belong almost exclusively to either the domain of individual preference or that of individual predisposition. Intra-school factors describe relationships between principals and their staffs and students. To some degree such relationships are determined by the transactions that principals establish and maintain with their staffs and students. School context and Edmonton Public School System factors are relatively enduring. These factors are essentially beyond principals' abilities to manipulate, determine, or control. Because individual factors, intra-school factors, and school context and Edmonton Public School System factors are all associated to some degree with principals' experiences of overall work-related stress, then by implication certain elements of the variance in principals' experiences of stress are within the personal control of individuals while other elements are determined almost exclusively by the School Board and its senior administrators. Hence, an awareness by principals of individual and intra-school factors within their domain of control or influence is a necessary pre-condition for successful stress management. It is equally important that school boards and senior school district administrators are aware that they also control certain other factors associated with the experiences of stress by principals within their school district.

Fifty percent of the principals of "one-administrator" schools interviewed identified the isolation of not having an assistant principal as a factor contributing to their experiences of stress. To appoint an assistant principal to each of the "one-administrator" schools in the Edmonton Public School District may not be economically feasible. However, the School Board and its senior administrators might examine proposals from principals and school staffs for the establishment of innovative and economically feasible support structures *within* "one-administrator" schools for these principals.

Even though a large proportion of principals identified school-based budgeting as reducing their experiences of work-related stress certain aspects of school-based budgeting were identified by some principals as contributing to their experiences of stress. Of major concern to a number of principals was the fact that the preparation of the budget placed substantial additional time demands upon principals and their staffs during a period of the school year when school level problems are normally more intense. The School Board and its senior administrators might examine proposals from principals and their staffs for reducing the overload associated with the preparation of the budget.

The one-line authority structure as established in the Edmonton Public School System was identified by a large proportion of principals as reducing stress. However, eight principals explained that a gap in communications still exists between principals and associate superintendents. These principals felt that associate superintendents are sometimes too preoccupied with administrative and policy-making concerns to have the time to visit each school within their zone several times a year to gain an optimum level of knowledge of the unique needs of these schools. Consideration might be given by the School Board first, to reducing what seems to be a heavy burden of administrative responsibilities on its associate superintendents and second, to establishing a clearly defined schedule of school visitations by associate superintendents to all schools in their zones. Such visits by associate superintendents would serve to: (1) close the perceived gap in communications between principals and their associate superintendents, and (2) provide the associate superintendents with a means to gain a more complete knowledge of the unique needs of each school in their zone.

A large proportion of principals reported that school-based selection of personnel by principals had no effect upon their experiences of stress. However, an almost equally large proportion felt that school-based selection of personnel by principals reduced their experiences of stress. Five principals commented on the need for professional development activities to improve their interviewing techniques for personnel selection. Consideration might be given to providing an optional inservice program for principals wishing to broaden their knowledge and skills in personnel selection.

Implications for Researchers

A number of issues for consideration by researchers interested in the effectiveness of school administration and the long-term well-being of school principals can be inferred from the findings of this descriptive and exploratory study of factors associated with principals' experiences of work-related stress.

1. A major finding of this study was that the decentralized system of school administration of the Edmonton Public School Board has aspects that reduce and other aspects that contribute to principals' experiences of stress. However, large proportions of principals identified only aspects of school-based budgeting, the one-line

authority structure, and school-based selection of personnel by principals which reduce stress. A study of factors associated with principals' experiences of stress in a centralized system of school administration would provide data on the impact of a centralized structure upon principals' experiences of stress and a basis for comparison with the findings of this study.

2. Three conceptual categories of factors associated with Edmonton Public School Board principals' experiences of work-related stress were identified in this study. A replication study of factors associated with principal stress in other school districts would provide evidence of the generalizability of the conceptual framework, developed from the findings of this study, of factors associated with principals' experiences of work-related stress.

3. Type A behavior scores of principals as measured by the Jenkins Activity Survey Instrument were not associated to any significant degree with their perceptions of overall work-related stress. Furthermore, Type A behavior scores of principals accounted for a relatively small amount of the variance in the frequency of use by principals of coping behaviors. Therefore, there seems to be little justification for further research into Type A behavior as a moderating factor of principals' perceptions of stress or preferences for certain coping behaviors.

4. Although this study was delimited to an identification and description of work-related sources of stress and, as such, did not attempt to assess extra-organizational sources of stress for principals, three principals explained during interviews that extra-organizational experiences of stress have some bearing upon their abilities to cope

effectively with work-related demands. There is a need for research that examines the potential relationship between extra-organizational sources of stress for principals and principals' perceptions of work-related stress.

5. Coping behaviors used by principals to deal with work-related stress *in general* were identified in this study. However, individual differences in coping with *specific* work-related situations were not examined. An intensive observation study of a very small sample of principals would provide insights into individual differences in coping with specific work-related situations.

6. A large proportion of principals felt that school-based selection of personnel by principals had no effect upon their experiences of stress. However, it is noteworthy that the seven principals who *spontaneously* identified school-based selection of personnel by principals as reducing stress held principalships of relatively new schools in which they had selected the entire staff. These findings suggest that school-based selection of personnel by principals may only have a discernible effect upon principals' experiences of stress when a substantial proportion of the staff has been selected by the principal. Further research to examine the relationship between the proportion of staff selected by principals and their experiences of stress is necessary.

CONCLUDING COMMENT

The findings of this study led to the conclusion that a majority of the Edmonton public school principals who participated in the study were not experiencing, in general, an excessive level of work-related stress. The introduction by the Edmonton Public School Board of a decentralized system of administration of its schools by means of school-based budgeting, a one-line authority structure in which the role of principal is more clearly defined, and school-based collegial decision-making has been identified in this study as being associated, in part, with lower levels of overall work-related stress among a large proportion of Edmonton public school principals. The Government of Alberta Fact Finding Commission (Kratzmann et al., 1980:41) in a discussion of school-based budgeting and collegial decision-making as these apply to working conditions or the quality of work-life for teachers maintained that:

> . . .the provision of local options highlights the need for the appointment of capable school principals and the furnishing of adequate support to them by school system officials. Their philosophical outlooks should be more democratic than autocratic; they should be interested in securing a cooperative, open school climate; they require the human relations skills to be sensitive to, and to be able to relate to local community characteristics; and they will need to have the willingness and capacity to work with teachers in assessing educational needs, setting objectives, evaluating resources, and making informed applications of one to the other.

The findings of this study reveal that (1) the greater proportion of Edmonton public school principals who participated in the semi-structured interviews and reported the role of principal as mildly or moderately stressful maintained administrative perspectives consistent with these recommendations, and (2) the Edmonton Public School Board has provided a relatively unambiguous channel for advice and support for its principals by means of the one-line authority structure.

The Government of Alberta Fact Finding Commission (Kratzmann et al., 1980:41) also maintained that the implementation of a system of decentralized decision-making requires of school boards a certain level of trust in the educational administrators and teachers they appoint. The Edmonton Public School Board has demonstrated a progressive attitude toward the administration of its schools and trust in its educational administrators and teachers by implementing school-based budgeting and a system of decentralized selection of personnel by principals.

Although interactions across the organizational boundary between schools and Central Office of the Edmonton Public School Board have become less ambiguous with the implementation of the one-line authority structure and school-based budgeting, the boundary between schools and the community continues to be a source of conflict and ambiguity for school principals. The Government of Alberta Fact Finding Commission (Kratzmann et al., 1980:11-12) in an analysis of the rapidly changing social and technological context of schools explained that:

> Generational differences, changing life-styles and limited consensus regarding what constitutes desirable or worthwhile social values make it difficult for the school of today to ascertain or reflect any form of social direction. Increasingly pluralistic constituencies demand a variety of services ranging from a return to the "3 R's" to family-life education. Within this turbulent and ever-changing social spectrum, a thousand and one subcultures exist, each with its own special agenda for the schools. Given these social circumstances and an obvious lack of unifying ideas or beliefs to guide us, it is not surprising that public education is currently beset with serious difficulties or that the school has become somewhat of a focal point for the resolution of social questions that communities have been unable to address in other ways.

The role of principal, described as the "pivotal exchange point" in the educational enterprise by Crowson and Porter-Gehrie (1980), will entail a certain level of stress as long as such ambiguities in society exist, and as long as the goals of the educational enterprise and criteria for accountability are inadequately defined.

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APPENDICES

APPENDIX A

THE QUESTIONNAIRE:

SOURCES OF STRESS FOR PRINCIPALS AND COPING BEHAVIORS

SOURCES OF STRESS FOR PRINCIPALS AND COPING BEHAVIORS

For Office Use
CC

SECTION A: SCHOOL DATA

Please check (✓) the response that gives the correct information. 1

1. Grade organization of your school: 1-3

( ) 1. Elementary
( ) 2. Elementary-Junior High 4
( ) 3. Junior High
( ) 4. Composite High

2. Compared with other schools that you know, how cohesive as a work group is your staff?

( ) 1. Low level of cohesiveness
( ) 2. Below average
( ) 3. Average 5
( ) 4. Above average
( ) 5. High level of cohesiveness

3. What level of support, in general, can you rely on from your staff?

( ) 1. Low level of support
( ) 2. Below average
( ) 3. Average 6
( ) 4. Above average
( ) 5. High level of support

4. Please write in the space below the number of students in your school.

→ (   ) students 7-10

5. Please write in the space below the number of years you have been principal in your present school (count the present year as one complete year).

→ (   ) year(s) 11-12

6. Please write in the space below the number of years of experience you have had in total as a principal (count the present year as one complete year).

→ (   ) year(s) 13-14

SECTION B: GENERAL STRESS

Stress is defined as the experience of a whole range and mixture of unpleasant sensations: predominantly tension, anxiety, depression, frustration, and a feeling of being emotionally drained resulting from pressures or overburdening demands.

Please check (✓) the appropriate response:

7. In general, how stressful do you find the role of principal?

( ) 1. Not stressful
( ) 2. Mildly stressful
( ) 3. Moderately stressful 15
( ) 4. Very stressful
( ) 5. Extremely stressful

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1
1-3

SECTION C: SOURCES OF STRESS

For each work-related situation please indicate by circling the appropriate number:

(1) in Column A, how often the situation has occurred in your work, and

(2) in Column B, how stressful the situation has been for you.

Column A How often has this situation occurred for you?							Column B How stressful has this situation been for you?					
NEVER	RARELY	ABOUT 1-3 TIMES/YEAR	ABOUT 1-3 TIMES/MONTH	ABOUT 1-3 TIMES/WEEK	ABOUT 1-3 TIMES/DAY	WORK-RELATED SITUATION	NOT STRESSFUL	MILDLY STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	EXTREMELY STRESSFUL	
0	1	2	3	4	5	1. Recommending the dismissal of a tenured teacher.	0	1	2	3	4	16,17
0	1	2	3	4	5	2. Recommending the non-renewal of a temporary contract.	0	1	2	3	4	18,19
0	1	2	3	4	5	3. Recommending the transfer of a teacher.	0	1	2	3	4	20,21
0	1	2	3	4	5	4. Resolving parent-teacher conflicts and misunderstandings.	0	1	2	3	4	22,23
0	1	2	3	4	5	5. Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	0	1	2	3	4	24,25
0	1	2	3	4	5	6. Resolving interpersonal conflicts among staff.	0	1	2	3	4	26,27
0	1	2	3	4	5	7. Working with teachers who view administrators with suspicion and/or hostility.	0	1	2	3	4	28,29
0	1	2	3	4	5	8. Conducting staff meetings.	0	1	2	3	4	30,31
0	1	2	3	4	5	9. Dealing with a teacher whom you consider deficient in teaching skills.	0	1	2	3	4	32,33
0	1	2	3	4	5	10. Having to tolerate a teacher whose attitudes you consider unprofessional.	0	1	2	3	4	34,35
0	1	2	3	4	5	11. Presenting a teacher with a formal report on his/her unsatisfactory performance.	0	1	2	3	4	36,37
0	1	2	3	4	5	12. Maintaining rapport and cooperation with all staff.	0	1	2	3	4	38,39

PLEASE TURN OVER ...

Column A How often has this situation occurred for you?							Column B How stressful has this situation been for you?					For Office Use CC 1 / 1-3
NEVER	RARELY	ABOUT 1-3 TIMES/YEAR	ABOUT 1-3 TIMES/MONTH	ABOUT 1-3 TIMES/WEEK	ABOUT 1-3 TIMES/DAY	WORK-RELATED SITUATION	NOT STRESSFUL	MILDLY STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	EXTREMELY STRESSFUL	
0	1	2	3	4	5	13. Developing school policy that all staff accept and actively support.	0	1	2	3	4	40,41
0	1	2	3	4	5	14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	0	1	2	3	4	42,43
0	1	2	3	4	5	15. Suspending a student from school.	0	1	2	3	4	44,45
0	1	2	3	4	5	16. Dealing with student vandalism of school property.	0	1	2	3	4	46,47
0	1	2	3	4	5	17. Informing parents of their child's unsatisfactory behavior.	0	1	2	3	4	48,49
0	1	2	3	4	5	18. Having to make the final decision that a particular student will have to repeat the year.	0	1	2	3	4	50,51
0	1	2	3	4	5	19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	0	1	2	3	4	52,53
0	1	2	3	4	5	20. Performing duties with interruptions (e.g. telephone, students, parents, etc.).	0	1	2	3	4	54,55
0	1	2	3	4	5	21. Having insufficient time to stop work and relax for lunch.	0	1	2	3	4	56,57
0	1	2	3	4	5	22. Being too rushed to complete tasks to your satisfaction.	0	1	2	3	4	58,59
0	1	2	3	4	5	23. Resolving the time demands of the principalship with the time demands of your family.	0	1	2	3	4	60,61
0	1	2	3	4	5	24. Contending with time pressures to complete the budget by the required date.	0	1	2	3	4	62,63
0	1	2	3	4	5	25. Projecting staffing needs.	0	1	2	3	4	64,65
0	1	2	3	4	5	26. Establishing consensus among staff about budget issues.	0	1	2	3	4	66,67
0	1	2	3	4	5	27. Making decisions about personnel, school equipment, and instructional materials subject to the constraints of the budget.	0	1	2	3	4	68,69
0	1	2	3	4	5	28. Having unclear role specifications from the Board and Central Office.	0	1	2	3	4	70,71

PLEASE TURN OVER ...

Column A How often has this situation occurred for you?							Column B How stressful has this situation been for you?					For Office Use CC 1 1-3
NEVER	RARELY	ABOUT 1-3 TIMES/YEAR	ABOUT 1-3 TIMES/MONTH	ABOUT 1-3 TIMES/WEEK	ABOUT 1-3 TIMES/DAY	WORK-RELATED SITUATION	NOT STRESSFUL	MILDLY STRESSFUL	MODERATELY STRESSFUL	VERY STRESSFUL	EXTREMELY STRESSFUL	
0	1	2	3	4	5	29. Having unclear guidelines as to your legal rights and authority as principal.	0	1	2	3	4	72,73
0	1	2	3	4	5	30. Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office or the Board.	0	1	2	3	4	74,75
0	1	2	3	4	5	31. Being criticized by parents or teachers for some of your administrative decisions.	0	1	2	3	4	76,77
0	1	2	3	4	5	32. Resolving in your own mind the expectations of your staff for you as principal.	0	1	2	3	4	78,79 2 1-3
0	1	2	3	4	5	33. Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	0	1	2	3	4	4,5
0	1	2	3	4	5	34. Making decisions about issues over which there are no clear school district policy guidelines.	0	1	2	3	4	6,7
0	1	2	3	4	5	35. Overcoming Central Office "red tape."	0	1	2	3	4	8,9
0	1	2	3	4	5	36. Having insufficient control over the appointment of teachers to your school.	0	1	2	3	4	10,11
0	1	2	3	4	5	37. Allocating teaching assignments.	0	1	2	3	4	12,13
0	1	2	3	4	5	38. Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	0	1	2	3	4	14,15
0	1	2	3	4	5	39. Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	0	1	2	3	4	16,17
0	1	2	3	4	5	40. Experiencing an inadequate level of advice and support from your Associate Superintendent.	0	1	2	3	4	18,19
0	1	2	3	4	5	41. Experiencing interpersonal conflict with your Associate Superintendent.	0	1	2	3	4	20,21
0	1	2	3	4	5	42. Experiencing a poor working relationship with your assistant principal(s).	0	1	2	3	4	22,23
0	1	2	3	4	5	43. Promoting a positive school image in the community.	0	1	2	3	4	24,25

PLEASE TURN OVER ...

SECTION D: COPING BEHAVIORS

For
Office
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CC
2
1-3

For each listed coping behavior please indicate by circling the appropriate number:

(1) in Column A, how often you have used the coping behavior for dealing with stressful situations, and

(2) in Column B, if you have used the listed behavior, how effective have you found the behavior in helping you cope with the stress associated with work-related situations.

Column A How often have you used this coping behavior?							Column B How effective have you found this coping behavior?					
NEVER	RARELY	ABOUT 1-3 TIMES/YEAR	ABOUT 1-3 TIMES/MONTH	ABOUT 1-3 TIMES/WEEK	ABOUT 1-3 TIMES/DAY	COPING BEHAVIORS	NOT EFFECTIVE	SLIGHTLY EFFECTIVE	MODERATELY EFFECTIVE	VERY EFFECTIVE	HIGHLY EFFECTIVE	
0	1	2	3	4	5	1. Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	0	1	2	3	4	26,27
0	1	2	3	4	5	2. Seek additional information about the situation before making the decision.	0	1	2	3	4	28,29
0	1	2	3	4	5	3. Consider a range of plans, then choose among the options.	0	1	2	3	4	30,31
0	1	2	3	4	5	4. Make every effort to be polite and prevent confrontations.	0	1	2	3	4	32,33
0	1	2	3	4	5	5. Take a break, then come back to the problem later.	0	1	2	3	4	34,35
0	1	2	3	4	5	6. Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	0	1	2	3	4	36,37.
0	1	2	3	4	5	7. Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	0	1	2	3	4	38,39
0	1	2	3	4	5	8. Make a concerted effort to enjoy yourself with some pleasurable activity after work.	0	1	2	3	4	40,41
0	1	2	3	4	5	9. Avoid discussing stressful work problems with your family or friends.	0	1	2	3	4	42,43
0	1	2	3	4	5	10. Ignore stressful problems because most problems solve themselves in time.	0	1	2	3	4	44,45
0	1	2	3	4	5	11. Use relaxation techniques such as meditation, yoga, self-hypnosis and biofeedback.	0	1	2	3	4	46,47

PLEASE TURN OVER ...

Column A How often have you used this coping behavior?							Column B How effective have you found this coping behavior?					For Office Use CC 2 1-3
NEVER	RARELY	ABOUT 1-3 TIMES/YEAR	ABOUT 1-3 TIMES/MONTH	ABOUT 1-3 TIMES/WEEK	ABOUT 1-3 TIMES/DAY	COPING BEHAVIORS	NOT EFFECTIVE	SLIGHTLY EFFECTIVE	MODERATELY EFFECTIVE	VERY EFFECTIVE	HIGHLY EFFECTIVE	
0	1	2	3	4	5	12. Seek advice and support from your Associate Superintendent.	0	1	2	3	4	48,49
0	1	2	3	4	5	13. Seek advice and support from other principals.	0	1	2	3	4	50,51
0	1	2	3	4	5	14. Seek advice and support from your assistant principal(s).	0	1	2	3	4	52,53
0	1	2	3	4	5	15. Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	0	1	2	3	4	54,55
0	1	2	3	4	5	16. Discuss stressful problems with your spouse or a friend.	0	1	2	3	4	56,57
0	1	2	3	4	5	17. Seek the participation of the whole staff in decision-making.	0	1	2	3	4	58,59
0	1	2	3	4	5	18. Delegate some of your less important but stressful responsibilities to trusted subordinates.	0	1	2	3	4	60,61
0	1	2	3	4	5	19. Delegate some of your more important but stressful responsibilities to trusted subordinates.	0	1	2	3	4	62,63
0	1	2	3	4	5	20. Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	0	1	2	3	4	64,65
0	1	2	3	4	5	21. Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	0	1	2	3	4	66,67
0	1	2	3	4	5	22. Participate in physical activities to reduce tension.	0	1	2	3	4	68,69
0	1	2	3	4	5	23. Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible.	0	1	2	3	4	70,71
0	1	2	3	4	5	24. Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill.	0	1	2	3	4	72,73

APPENDIX B

THE SEMI-STRUCTURED INTERVIEW SCHEDULE

PRINCIPAL STRESS: ASSOCIATED FACTORS

INTERVIEW SCHEDULE

PRINCIPAL STRESS: ASSOCIATED FACTORS

(To be said to the interviewee)

Thank you for agreeing to participate in this interview. May I assure you that everything said during the interview will remain strictly anonymous and confidential. The interview serves three purposes:

1. To identify work-related situations that you have found to be very or extremely stressful,
2. To identify factors that reduce your experience of work-related stress, and
3. To identify factors that contribute to your experience of work-related stress.

Question 1.

Could you identify and describe work-related situations that you have experienced as very or extremely stressful and give reasons why these were so stressful?

Question 2.

Could you identify and describe aspects of your school, your administrative style, or any other factors that reduce your experience of overall work-related stress?

Question 3.

Could you identify and describe aspects of your school, your administrative style, or any other factors that contribute to your experience of overall work-related stress?

APPENDIX C

WORK-RELATED SITUATIONS AND INDIVIDUAL CHARACTERISTICS

Pearson correlation coefficients were computed between Type A behavior scores and experience of principals on the one hand and principals' perceptions of stress of each of the 43 work-related situations on the other. These correlation coefficients are presented in Table C.1.

Table C.1

Pearson Correlation Coefficients of Principals' Perceptions of Stress of Each Work-Related Situation and Selected Variables: Type A Behavior Scores and Experience of Principals

Work-Related Situations	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Present School	Experience in Total
1. Recommending the dismissal of a tenured teacher.	.154	.058	-.531**	.212	.215	.328
2. Recommending the non-renewal of a temporary contract.	.042	-.106	-.198	.184	.119	.143
3. Recommending the transfer of a teacher.	.034	.043	-.109	.093	.142	.073
4. Resolving parent-teacher conflicts and misunderstandings.	.029	.233	-.002	-.079	.057	.075
5. Reprimanding a teacher (e.g. lateness, or dismissing a class too soon, or not being on supervision).	-.196	-.033	-.225	-.143	.396**	.293*
6. Resolving interpersonal conflicts among staff.	-.136	.051	-.239	-.219	.433**	.278*
7. Working with teachers who view administrators with suspicion and/or hostility.	.003	-.013	-.351**	.035	.364**	.202
8. Conducting staff meetings.	.050	.260*	-.228	-.273*	-.188	-.165
9. Dealing with a teacher whom you consider deficient in teaching skills.	-.003	.144	.048	-.064	.039	.060
10. Having to tolerate a teacher whose attitudes you consider unprofessional.	.083	-.053	-.150	-.048	.300*	.114
11. Presenting a teacher with a formal report on his/her unsatisfactory performance.	.198	.226	-.161	.197	.299*	.274
12. Maintaining rapport and cooperation with all staff.	-.191	.049	-.210	-.192	-.060	-.075
13. Developing school policy that all staff accept and actively support.	.036	.102	-.149	-.146	.017	.011
14. Being caught as "the person in the middle" between conflicting demands from teachers and central office administrators.	-.134	-.046	-.083	.098	.427**	.241*
15. Suspending a student from school.	-.181	.059	-.128	-.024	.103	.013
16. Dealing with student vandalism of school property.	-.119	.198	-.154	-.354**	.396**	.137
17. Informing parents of their child's unsatisfactory performance.	.012	.190	-.112	-.265*	.301*	-.012

Table C.1 (continued)

Work-Related Situations	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Present School	Experience in Total
18. Having to make the final decision that a particular student will have to repeat the year.	-.141	.248*	-.013	-.226	.034	.046
19. Completing reports, questionnaires, forms, letter writing, and other paperwork.	-.009	.257*	.050	-.269*	-.225	.049
20. Performing duties with interruptions (e.g. telephone, students, parents, etc.).	.004	.089	-.020	-.138	.131	-.005
21. Having insufficient time to stop work and relax for lunch.	.115	-.002	.186	.135	.076	.057
22. Being too rushed to complete tasks to your satisfaction.	.206	.205	.016	-.132	.222	.139
23. Resolving the time demands of the principalship with the time demands of your family.	.166	.228	-.071	-.116	.144	-.112
24. Contending with time pressures to complete the budget by the required date.	-.111	.067	-.085	-.240*	.103	.010
25. Projecting staffing needs.	-.074	-.011	.011	-.209	.095	-.032
26. Establishing consensus among staff about budget issues.	-.016	-.028	-.049	-.210	.255*	.000
27. Making decisions about personnel, school equipment, and instructional materials subject to the constraints of the budget.	-.090	.110	-.053	-.264*	.128	.004
28. Having unclear role specifications from the Board and Central Office.	-.045	-.005	-.169	-.262*	.442**	.040
29. Having unclear guidelines as to your legal rights and authority as principal.	-.185	-.017	-.159	-.314*	.267*	-.077
30. Performing the role of principal with limited recognition and positive feedback from staff, parents, Central Office or the Board.	.087	.074	-.316*	-.207	.241*	-.069
31. Being criticized by parents or teachers for some of your administrative decisions.	-.069	.077	-.234	-.167	.099	-.093
32. Resolving in your own mind the expectations of your staff for you as principal.	.021	.056	.036	-.222	-.012	-.130

Table C.1 (continued)

Work-Related Situations	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Present School	Experience in Total
33. Having to implement Board policies without having adequate opportunities to provide input into policy formulation.	.045	.163	-.096	$-.129^{*}$	$.409^{**}$	$.248^{*}$
34. Making decisions about issues over which there are no clear school district policy guidelines.	-.083	.014	-.046	$-.278^{*}$	.125	-.222
35. Overcoming Central Office "red tape."	.047	.106	-.139	$-.336^{**}$	$.250^{*}$	.031
36. Having insufficient control over the appointment of teachers to your school.	.135	-.029	.020	-.070	$.314^{*}$	-.069
37. Allocating teaching assignments.	.105	.145	-.115	-.202	$.261^{*}$	.083
38. Contending with unrealistic expectations of teachers, parents, Central Office, and the Board about what can be accomplished.	.117	.094	.045	-.117	$.297^{*}$	.065
39. Delegating an area of responsibility to a staff member and, subsequently, having to bear the consequences of that person's poor performance.	.149	.232	-.026	-.156	$.390^{**}$	.082
40. Experiencing an inadequate level of advice and support from your Associate Superintendent.	.103	.177	-.237	.056	$.338^{*}$	.197
41. Experiencing interpersonal conflict with your Associate Superintendent.	.332	.190	-.191	.300	$.470^{*}$	-.044
42. Experiencing a poor working relationship with your assistant principal(s).	.038	.106	-.208	-.058	$.473^{*}$	.272
43. Promoting a positive school image in the community.	-.151	.031	-.134	$-.385^{**}$	.054	-.172

* $p < .05$

** $p < .01$

APPENDIX D

COPING BEHAVIORS AND INDIVIDUAL CHARACTERISTICS

Pearson correlation coefficients were computed between Type A behavior scores and experience of principals on the one hand and the frequency of use by principals of each of the 24 coping behaviors on the other. These correlation coefficients are presented in Table D.1.

Table D.1

Pearson Correlation Coefficients of the Frequency of Use by Principals
of Each Coping Behavior and Selected Variables: Type A
Behavior Scores and Experience of Principals

Coping Behaviors	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Total
1. Make quick decisions to save time and avoid becoming preoccupied with any one troublesome issue.	.382**	.295*	.132	.177	-.025
2. Seek additional information about the situation before making the decision.	.057	.066	.162	.349**	-.014
3. Consider a range of plans, then choose among the options.	.056	.206	.136	.238*	-.322*
4. Make every effort to be polite and prevent confrontations.	.094	.249	.303*	.080	-.114
5. Take a break, then come back to the problem later.	.158	.183	.165	.105	-.139
6. Set aside a period of the day when you do not accept visitors, requests or phone calls so that you can catch up with other work.	-.048	.050	-.030	.072	.348**
7. Work harder and longer hours to clear the back-log of work to get on top of stressful work demands.	.112	.120	.343**	.061	-.073
8. Make a concerted effort to enjoy yourself with some pleasurable activity after work.	.058	.058	.047	.064	-.291*
9. Avoid discussing stressful work problems with your family or friends.	.079	.296*	-.105	-.039	.200
10. Ignore stressful problems because most problems solve themselves in time.	-.108	.087	-.018	-.019	.149
11. Use relaxation techniques such as meditation, yoga, self-hypnosis and biofeedback.	.244*	-.058	.053	.165	-.084
12. Seek advice and support from your Associate Superintendent.	-.162	.022	.072	-.129	-.124
13. Seek advice and support from other principals.	.037	-.064	.335**	-.097	-.411**
14. Seek advice and support from your assistant principal(s).	.164	.049	-.150	.072	.512***

Table D.1 (continued)

Coping Behaviors	Type A Behavior	Factor S Speed and Impatience	Factor J Job Involvement	Factor H Hard-Driving Competitive	Experience in Total
15. Keep working on the stressful problem, no matter how long, until it has been resolved to your satisfaction.	-.112	.007	.086	.064	-.052
16. Discuss stressful problems with your spouse or a friend.	.177	.070	.194	.112	-.016
17. Seek the participation of the whole staff in decision-making.	-.151	.135	.152	.031	-.075
18. Delegate some of your less important but stressful responsibilities to trusted subordinates.	.266*	.219	-.007	.219	-.005
19. Delegate some of your more important but stressful responsibilities to trusted subordinates.	.195	.223	-.100	.139	.081
20. Use the school system's rules and procedures as a buffer against community, parental or other stressful problems.	-.015	.071	.072	.088	-.094
21. Patrol the school and its grounds to maintain a presence in order to anticipate and prevent potentially stressful problems.	.321*	.103	.209	.063	-.151
22. Participate in physical activities to reduce tension.	.090	.119	.168	-.129	-.035
23. Tackle stressful situations immediately and directly to get the problem out of your mind as quickly as possible.	.302*	.122	.147	.207	-.229
24. Let people know in unequivocal terms when you no longer wish to listen to requests or demands that you cannot fulfill.	.110	.245*	.070	-.133	.088

* $p < .05$

** $p < .01$

*** $p < .001$

APPENDIX E

THE CONTENT ANALYSIS SYSTEM

THE CONTENT ANALYSIS SYSTEM

The procedure followed for analyzing the qualitative interview data is summarized below.

The content analysis system was developed to identify patterns and themes in:

1. principals' descriptions of work-related situations that they had experienced as very or extremely stressful and reasons why these situations were so stressful;

2. principals' descriptions of aspects of their schools, their administrative styles, or any other factors that reduced their experiences of overall work-related stress;

3. principals' descriptions of aspects of their schools, their administrative styles, or any other factors that contributed to their experiences of overall work-related stress; and

4. principals' descriptions of factors unique to the Edmonton Public School System that either reduced or contributed to their experiences of overall work-related stress.

The Data

The data which were content analyzed were in the form of typed transcripts prepared from audiotapes of 36 semi-structured interviews with principals.

Elements of the Content Analysis System

The content analysis system contained the following elements:

1. Four *a priori* major analysis categories which were labelled:

A. Work-related sources of stress,

B. Factors reducing principals' experiences of overall work-related stress,

C. Factors contributing to principals' experiences of overall work-related stress,

D. Edmonton Public School System factors and overall work-related stress.

These major analysis categories were developed from the research problems addressed in the study.

2. *A posteriori* sub-categories of the above four major analysis categories. These sub-categories were generated (emerged) upon analysis of the interview data.

The Content Analysis Procedure

The method for the content analysis of the semi-structured interview data was essentially the same as that described by Bogdan and Biklen (1982:165-169). Interview transcripts were analyzed in the following manner:

1. The pages of all the transcripts were numbered sequentially and a respondent code number was placed at the beginning of each interview transcript.

2. Each transcript was read twice and lists of sub-categories of the four major analysis categories were generated.

3. Each sub-category was assigned a brief descriptor and a code number.

4. The interview transcripts were read again. Units of data were scrutinized to determine the relevance of each unit of data to the

major analysis categories and to the sub-categories of the major analysis categories. A unit of data was either a single word, an expression, a phrase, a sentence, part of a paragraph, a paragraph, or more than one paragraph that related unambiguously to the descriptor of a sub-category. Additional sub-categories were generated for those units of data that could not be classified into existing sub-categories. Parentheses were placed around each relevant unit of data. A respondent code number, a major category code number, and a sub-category code number were assigned to each relevant unit of data.

5. Each transcript was photocopied when the coding of the data was completed.

6. Each coded unit of data was cut from the photocopied transcripts. The master transcripts were retained for reference purposes. Coded units of data were placed in identically coded manila folders. When the assignment of all the coded data to manila folders was completed, any particular manila folder contained all the comments, descriptions, and insights of the principals related to a particular sub-category of one of the four major analysis categories.

7. The contents of each manila folder were subsequently examined for a common descriptor and underlying patterns and themes. If a sub-category was found to contain more than one theme, then these themes constituted sub-categorizations of the sub-category. The four major categories and salient sub-categories and themes became the major headings, side headings, and paragraph headings respectively of the qualitative sections of the study.